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Manufacturers Record

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BALTIMORE, JANUARY 9, 1913.

ADVANCE IN PRICE OF "THE SOUTH: THE NATION'S GREATEST ASSET."

Within a few days after the publica-
tion last year of "Thirty Years of
Southern Upbuilding" we received many
suggestions and requests that a publi-
cation on similar lines should be is-
sued this year, in order that the great
interest aroused throughout this coun-
try and abroad by that work might be
strengthened and further developed.
In response to such suggestions we an-
nounced some months ago the publica-
tion in the early part of this year of
"The South: The Nation's Greatest
Asset." The magnitude of this has
steadily developed from the first day
on which it was planned. It has been
possible to bring together special arti-
cles from some of the most noted scien-
tists of the country and editorial re-
views of the South and its resources
presented in an entirely different way
from anything heretofore published.
As valuable to our readers and to the
South as was "Thirty Years of South-
ern Upbuilding," we are able to say with-
out hesitation that "The South: The
Nation's Greatest Asset" will far ex-
ceed that publication in general interest,
and that it will be far more valuable to
the people of the North and West and of
Europe as well as to the people of the
South.

Because of these facts and of the
greatly increased cost, the price of

paper-bound copies will be advanced
from 50 cents to \$1 on all orders re-
ceived after January 31. The price in
other bindings of \$1.50 for cloth and \$3
for leather will remain unchanged. All
subscriptions received after January 31
for copies in paper binding will be on
the basis of \$1 per copy for any number
from 1 to 9. For from 10 copies up to
99 the price will be 75 cents per copy,
and for 100 or more copies the price
will be 50 cents per copy.

Since the announcement of the price
of 50 cents a copy in paper has been ad-
vertised broadly throughout the coun-
try, this increased price will not take
effect until February 1, in order that
all who desire to avail themselves of
the 50-cent price may have ample time
in which to do so.

Every subscriber to the *Manufactur-
ers Record* will receive a copy without
extra cost.

If you are interested in advancing
the progress of the South, in acquaint-
ing yourself or your friends with the
varied resources and potentialities of
this section; if you are interested in
drawing men or money to the South,
you should order extra copies to be
mailed to your friends or business ac-
quaintances. All orders for less than
10 copies must be accompanied by
check, in order to avoid bookkeeping
accounts for small items of this kind.
Send in your order promptly.

GASOLINE ENGINES AND BLOW- ERS USED IN CLEARING LAND.

The importance of economical means
of clearing cut-over lands of the stumps
lends interest to any method by which
such work may be aided or expedited.
The use of blowers and pipes convey-
ing the air current to the base of the
burning stumps is described by R. E.
DeMary in the current issue of *Gas
Power* as applied in the Pacific North-
west. This is known as the "blow-pipe
process," and it is stated that it has
met with great success. The following
description of the process is given:

A small portable engine of one or two
horse-power is used to drive a blower, from
which pipe lines are run to various stumps.
A portion of the earth is dug away from a
stump, a fire started, and when well under
way a blast of air by one of the pipes is
directed against it, and in a short time the
stump, with roots included, is entirely con-
sumed. A 14-inch blower will supply air for
at least 6, and in most cases 8 and even 10
stumps. This outfit will clear under aver-
age conditions over half an acre per day
and at a cost not exceeding \$5, which in-
cludes cost of gasoline, labor and other
items of expense. After the land is cleared
the engine may be used for various farm
purposes, while the blower can be converted
into a forge.

This process may, of course, be ex-
tended by using larger engines and blow-

ers. Since it has proved a success on
the Pacific Coast, it would seem that
similar results might be obtained in
other sections where large areas are to
be cleared.

CONSTRUCTION WORK ACTIVITY THROUGHOUT THE SOUTH.

The wide sweep of industrial, rail-
road and financial activity throughout
the South is faintly indicated in the
fact that during 1912 the *MANUFACTUR-
ERS RECORD* in its Construction Depart-
ment published 57,686 items bearing on
the construction and financial activities
of this section. In very many cases
the same enterprise was reported a
number of times, these items dealing
with its early organization and the later
stages covered in the letting of con-
tracts and in the progress of the work.
Every item, however, had in it some-
thing of interest and value to many
thousands of people. There is scarcely
a line of human activity not repre-
sented. It would be difficult to find any
business man, whatever the character of
his work, whether he be a manufacturer,
merchant, railroad operator, profes-
sional man, farmer or day laborer, who
could not have found in these items
facts of great importance. For these
items represented the expenditure of
many millions, and tens of millions, of
dollars in every line of construction
work in the building of railroads, the
establishment of industrial and mining
plants of the widest variety, the build-
ing of good roads and of municipal im-
provements, the establishment of many
hundreds of banks, the issuing of mil-
lions of dollars of securities, the build-
ing of churches and schools, of hotels
and theaters and warehouses, office
buildings and miscellaneous structures
of almost every variety needed in our
modern civilization. There was thus
created through this work employment
for many thousands of people, for the
day laborer, the mechanic, the engineer,
the architect, the contractor; for the
man who makes and the man who sells
machinery and supplies of every var-
iety, from the dealer in office supplies
to the builder of the heaviest machin-
ery. These enterprises, for which engi-
neering, contracting and equipment
work were needed, included fertilizer
factories and flour and feed mills, found-
ry and machine shops, great land de-
velopment operations, including irriga-
tion and reclamation, road and street
work and sewer construction, telephone
systems and textile mills, water-power
developments and water-works. All
the wide variety of equipment needed
in the construction of the great office
buildings and hotels and churches,
banks and dwellings and stores was
likewise represented in these items of
news. And then, too, these facts cover
the building of hundreds of miles of
railway, street and steam, the purchase
of railway equipment, the organization
of banks, national and private, and the
issuing of securities by States, cities,
towns, counties and private corpora-

tions. Who is there who could not find
something of interest in all this wide
line of work and some way of increas-
ing his own business by a study of such
items?

In this great list were over 57,000
items. There were 792 bearing on
bridges, culverts and viaducts; 1036
dealing with electric plants; 466 with
drainage and irrigation operations; 432
with coal mines and coke ovens; 543
bearing on ice-making and cold-storage
plants; 1114 on land developments; 536
on mining work; 522 on motors and
garages; 2390 on road and street work;
1154 on water-works; 501 on textile
mills, and 610 on woodworking plants.
These are but indicative of the number
of items and the wide variety, as illus-
trated in the following table:

A Year's Construction Items.

	Totals
	Decem- ber. for year.
Industrial and Developmental.	
Bridges, Culverts, Viaducts....	56 792
Canning and Packing Plants....	19 338
Clayworking Plants.....	18 167
Coal Mines and Coke Ovens....	36 432
Concrete and Cement Plants....	1 61
Cotton Compresses and Gins....	14 378
Cottonseed-oil Mills.....	9 165
Drainage and Irrigation.....	46 466
Electric Plants.....	80 1,036
Fertilizer Factories.....	12 143
Flour, Feed and Meal Mills....	20 242
Foundry and Machine Plants..	48 501
Gas and Oil Developments....	67 653
Ice and Cold-storage Plants....	30 543
Iron and Steel Plants.....	7 94
Land Developments.....	99 1,114
Lumber Manufacturing.....	73 939
Metal-working Plants.....	14 127
Mining.....	52 536
Miscellaneous Construction....	44 563
Miscellaneous Enterprises.....	109 1,386
Miscellaneous Plants.....	173 2,365
Motors and Garages.....	50 522
Railway Shops, Terminals, Roundhouses, etc.....	9 168
Road and Street Work.....	141 2,390
Sewer Construction.....	74 929
Telephone Systems.....	30 372
Textile Mills.....	36 501
Water-power Developments....	13 227
Water-works.....	67 1,154
Woodworking Plants.....	38 610
Buildings.	
Apartments.....	101 1,427
Association and Fraternal....	28 529
Bank and Office.....	71 1,359
Churches.....	65 1,181
City and County.....	54 790
Courthouses.....	15 262
Dwellings.....	388 5,483
Government and State.....	21 330
Hotels.....	56 836
Miscellaneous.....	85 1,064
Railway Stations, Sheds, etc..	41 514
Schools.....	115 2,295
Stores.....	174 3,045
Theaters.....	20 254
Warehouse.....	58 840
Railways.	
Steam.....	163 2,351
Street.....	18 343
Financial.	
Corporations.....	161 2,165
New Securities.....	243 3,894
	3,361 48,946
Burned, etc.....	228 2,363
Machinery, Proposals and Sup- plies Wanted.....	415 6,377
Totals.....	4,004 57,686

In order that a detailed study may be
made of the progress by States in the
varied lines of industries, the follow-

ing table is presented, showing the number of items reported from each State and the character:

of Columbia, the lowest on the list, with 1733 items.

These facts are worthy of study.

the issuing of securities and other evidences of progress.

As in industrial items, so in the build-

than in the old and established communities, where there is but little of new population.

ONE YEAR'S SOUTHERN CONSTRUCTION ITEMS BY STATES.

	ALA.	ARK.	D.C.	FLA.	GA.	KY.	LA.	MD.	MISS.	MO.	N.C.	OKLA.	S.C.	TENN.	TEX.	VA.	W.VA.	TOTAL
INDUSTRIAL AND DEVELOPMENTAL.																		
Bridges, Culverts, Viaducts.....	53	48	4	50	39	35	29	49	50	56	46	26	25	66	113	65	38	792
Canning and Packing Plants.....	21	29	..	40	11	15	16	33	21	15	19	10	11	12	49	30	6	338
Clayworking Plants	14	3	..	9	11	14	3	8	..	13	12	3	15	10	37	4	11	167
Coal Mines and Coke Ovens.....	66	11	..	1	2	136	..	11	..	9	2	15	1	30	18	25	105	432
Concrete and Cement Plants.....	11	2	..	1	5	5	1	2	2	8	1	4	..	5	8	3	3	61
Cotton Compresses and Gins.....	28	29	..	2	48	4	4	..	12	..	22	29	41	24	120	14	1	378
Cottonseed-Oil Mills	16	4	1	1	29	4	1	..	7	..	12	10	13	4	61	1	1	165
Drainage and Irrigation.....	1	56	1	24	12	3	76	1	32	16	28	6	10	11	181	8	..	466
Electric Plants	44	59	5	49	118	101	35	53	32	82	61	56	46	35	185	49	26	1036
Fertilizer Factories	19	1	..	13	42	4	6	3	15	2	17	5	3	12	1	143
Flour, Feed and Meal Mills.....	17	9	1	2	4	39	7	9	7	16	37	10	9	27	25	14	9	242
Foundry and Machine Plants.....	48	11	6	19	25	32	6	38	22	61	32	28	15	51	54	34	19	501
Gas and Oil Developments.....	11	11	..	1	2	38	40	..	11	8	..	282	..	9	115	1	124	653
Ice and Cold-Storage Plants.....	25	22	2	48	35	29	29	23	11	22	45	13	27	36	129	36	11	543
Iron and Steel Plants.....	29	3	2	5	..	4	1	3	..	4	..	12	4	13	14	94
Land Developments.....	77	38	10	133	75	20	45	45	57	42	89	34	91	50	138	108	62	1114
Lumber Manufacturing	64	86	..	69	56	42	80	23	104	37	81	17	39	57	82	57	45	939
Metal-Working Plants	7	3	..	2	9	5	3	20	1	15	14	15	3	7	6	9	8	127
Mining	37	13	..	15	27	24	7	11	7	167	22	51	9	41	47	43	15	536
Miscellaneous Construction	30	21	3	78	22	21	106	32	35	29	19	6	11	24	72	45	9	563
Miscellaneous Enterprises	81	21	9	75	85	71	62	97	44	135	100	81	72	103	195	98	57	1386
Miscellaneous Plants	140	49	21	112	153	161	106	214	59	288	172	93	67	176	280	196	78	2365
Motors and Garages.....	13	4	16	27	55	35	9	42	3	81	38	8	32	36	69	32	22	522
Railway Shops, Terminals, Roundhouses, etc....	5	6	..	3	13	10	5	11	5	8	9	6	4	10	43	15	15	168
Road and Street Work.....	248	72	12	171	118	104	103	148	186	92	143	36	53	169	471	199	65	2390
Sewer Construction	51	39	6	78	75	27	43	63	28	72	66	28	39	45	166	72	31	929
Telephone Systems	18	18	..	20	20	26	8	10	11	10	37	36	28	37	51	22	20	372
Textile Mills	32	3	..	1	72	8	1	20	6	10	177	1	77	46	17	21	9	501
Water-power Developments	27	10	2	2	23	12	1	8	1	10	31	8	21	29	7	17	18	227
Water-works	51	48	8	57	148	63	39	51	42	60	79	93	53	34	198	78	52	1154
Woodworking Plants	44	72	1	21	38	40	26	36	11	37	80	10	8	60	60	37	29	610
BUILDINGS.																		
Apartments	41	18	38	57	95	30	14	64	6	636	39	13	17	86	138	123	12	1427
Association and Fraternal.....	20	22	4	32	45	31	30	23	14	37	27	9	7	41	113	45	29	529
Bank and Office.....	77	62	50	115	126	70	39	56	35	83	92	35	71	77	255	74	42	1359
Churches	68	61	21	54	95	58	49	67	42	64	108	20	66	88	185	76	59	1181
City and County.....	63	27	7	65	68	34	41	32	11	31	64	34	16	37	165	53	12	760
Courthouses	18	28	..	25	18	15	3	1	22	23	12	16	7	6	57	5	6	262
Dwellings	248	72	372	324	526	163	233	581	31	894	284	76	131	453	628	420	47	5483
Government and State.....	11	9	11	19	14	22	18	32	12	21	13	22	32	8	45	28	13	330
Hotels	53	38	11	100	70	55	23	25	21	71	94	4	38	52	120	37	24	836
Miscellaneous	63	36	17	66	67	60	42	82	21	85	111	21	42	68	155	82	46	1064
Railway Stations, Sheds, etc.....	38	33	1	29	47	18	10	28	16	36	45	24	29	31	90	24	15	514
Schools	109	71	24	101	139	83	119	102	110	112	134	85	110	178	564	146	108	2295
Stores	252	102	73	244	283	108	87	98	48	289	188	47	139	202	631	176	78	3045
Theaters	21	11	13	26	14	19	19	28	5	34	21	8	16	20	55	24	20	354
Warehouses	36	14	7	46	73	97	25	88	6	69	59	12	50	40	140	72	6	840
RAILWAYS.																		
Steam	149	140	18	108	167	124	105	60	93	112	148	149	72	159	511	102	134	2351
Street	32	20	11	19	28	12	14	1	18	16	34	9	11	25	54	22	17	343
FINANCIAL.																		
Corporations	133	133	24	156	234	46	76	76	66	73	138	139	191	148	387	106	39	2165
New Securities.....	162	67	..	232	323	135	123	109	348	266	257	215	150	207	897	218	185	3894
<hr/>																		
	2922	1765	810	2942	3806	2313	1967	2618	1733	4354	3357	1959	2032	3187	8194	3191	1796	48946
Burned, etc.....																		2363
Machinery, Proposals and Supplies Wanted.....																		6377
<hr/>																		
Total for Year.....																		57686

Texas led, with 8194 items; Missouri followed, with 4354; Georgia came third, with 3806; North Carolina fourth, with 3357, Virginia following, with 3191, and Tennessee came close behind, with 3187. Florida reported 2942 items, and Alabama 2922, the great iron and steel State of the South falling short by 20 items of Florida. As Florida's population is only about 750,000, the general activity in that State which enables it to report so large a number of enterprises is worthy of special consideration. Kentucky, a State of almost infinite potentialities, rich in minerals, in timber and in soil, which should have been one of the leaders in industrial activities, had 2313 items, or more than 600 less than Florida. Mississippi, a State of great possibilities as yet but dimly appreciated by its own people, was, with the exception of the District

They illuminate the whole industrial and business situation through the South. They should encourage the States which have made such a splendid showing to still greater activity, and they should stimulate the States which have not yet measured up to their opportunities to do greater things, and to make their development commensurate with their resources.

Considering population, Florida takes the lead. This is especially interesting, in view of the fact that during the last decade the population in Florida increased more than 42 per cent, against an average of 18 per cent, in all the Southern States. Thus, this heavy movement of population to Florida finds expression in its great activity in industrial and development enterprises, in the building of schools and churches,

ing of schools, considering its population, Florida made a greater showing than any other State in the South, though, of course, several States of much larger population exceeded Florida in actual number of schools; and yet against the 101 schools for Florida, Kentucky, with its population of 2,290,000, as against Florida's 750,000, had only 83 school building items. Naturally, with educational progress as shown in these items, has gone a progress in religious matters, and the number of church-building items reported by Florida is as interesting when compared with what other States are doing as the school-building figures quoted. It must, however, be understood that where there is a great influx of new population, school and church buildings of necessity are constructed in larger numbers in proportion to population

AS VIEWED IN ATLANTA AND COLUMBIA.

Wilmer L. Moore, president of the Atlanta Chamber of Commerce, in a letter extending New-Year greetings to the MANUFACTURERS RECORD, writes:

The growth and development of our good city for the year 1912 has been indeed marvelous. To those of her citizens who are able to have a vision outlining the possibilities of the Atlanta of the future, there is aroused an enthusiasm and a loyalty, bringing about a determination to make our city the leading city of the South from the standpoint of the financial, industrial, commercial, educational and the cultural.

The Atlanta spirit, which is but another expression of the co-operation of all of our people in everything that looks to the good of the city, is today stronger and more universally prevalent than at any time in the city's history.

The MANUFACTURERS RECORD is a medium by which the advantages of the Southern country in all of its phases have been

brought to the attention of the world, and you are to be congratulated upon the excellent constructive work which you have done in behalf of the people, whom you have so materially aided.

The Atlanta Chamber of Commerce wishes for you a period of prosperity greater than that you have ever experienced heretofore, and a field of operation widened by the good which you have done in the past, and the possibilities which are being opened through the information disseminated by you as to the South's resources, opportunities and increased wealth.

Hon. W. H. Gibbes, Mayor of Columbia, under whose administration that city has made remarkable progress, writing under date of December 31, said:

Since my youth I have looked with a respect and gratitude which have amounted to an affection upon the consistent, persistent and devoted efforts of the MANUFACTURERS RECORD towards the upbuilding of our entire beloved South.

LOSS IN BUYING AWAY FROM HOME.

A strong call to farming in North Carolina is made in a bulletin of the State Department of Agriculture, dealing with recent progress in that State and the advantages as to markets for farm products. Bearing upon that is a study of the value of farm products shipped annually into the State, not because of lack of ability to raise them in the State, but because the opportunities have not been seized as they should. Some time ago the department, through a census of business bodies of the State, reached a conclusion that about \$60,000,000 was sent from the State for food products in 1909. Another census of the kind was taken this year by means of letters addressed to railroad companies of the State engaged in interstate traffic, asking for data showing the amount of food and feed products shipped into the State in 1911. Returns were received from eight railroad companies, all but two giving figures taken directly from their books, and upon these returns is based the estimate that \$39,640,886 were sent away from the State for food and feed products in 1911, the items being as follows:

Hay.....	\$15,907,830
Cured meat.....	6,666,426
Flour.....	4,978,530
Corn.....	4,346,421
Vegetables.....	3,516,716
Feedstuffs.....	2,225,625
Dressed beef.....	1,289,279
Apples.....	357,105
Wheat.....	229,541
Oats.....	119,966
Canned goods.....	116,228
Barreled pork.....	65,375
Cheese.....	39,057
Fresh pork.....	37,664
Syrup.....	21,111
Dried fruit.....	19,420
Corned beef.....	12,937
Honey.....	790
Butter.....	875

The quantities included 70,334,329 pounds of vegetables, 53,331,405 pounds of cured meat, 14,325,319 pounds of dressed beef, 5,433,026 bushels of corn, 829,755 barrels of flour, 780,391 tons of hay, 312,459 pounds of cheese, 376,643 pounds of fresh pork, 239,932 bushels of oats, 229,541 bushels of wheat, 194,203 pounds of dried fruit, 103,496 pounds of corned beef, 89,025 tons of feedstuffs, 71,421 barrels of apples, 52,777 gallons of syrup, 40,491 cases of canned goods, 7895 pounds of honey, 4376 pounds of butter and 2215 barrels of pork. The bulletin, expressing the hope that some day the millions of dollars thus spent for outside products will be placed in the banks of the State to the credit of its farming population, says, comparing the \$60,000,000 expenditure

TAMPA AGAIN SETS A GOOD EXAMPLE.

Executive Department,
City of Tampa, Fla.
D. B. McKay, Mayor.

Tampa, Fla., January 3, 1913.

Editor Manufacturers Record, Baltimore, Md.:

Dear Sir—I am pleased to advise you that the city of Tampa has decided to take two pages in your forthcoming special edition, "The South: The Nation's Greatest Asset," thus duplicating the contract given you for the special edition published last year, "Thirty Years of Southern Upbuilding."

As I have previously written you, I consider the money paid you by Tampa for the space in last year's special edition a splendid investment. I was able to trace through correspondence coming to my office and through new citizens calling on me very direct results to that advertising.

The city of Tampa and what is known as the Tampa territory are developing very rapidly and substantially. There is no city and no section in this country more prosperous today or that has brighter prospects. We are laying plans in Tampa for a really great city. We believe that Tampa is to be a greater beneficiary through the Panama Canal traffic than any other city on either the South Atlantic or Gulf coast. We are developing here a commodious and most practically arranged harbor; in fact, Gen. W. H. Bixby, chief of engineers of the United States Army, has stated that when our plans are worked out we will have the ideal harbor.

The country around Tampa is settling up very rapidly, and with a most desirable class of people. We want to present these facts to the world, and know of no more effective medium through which to reach the people with which we want to see this section populated than the Manufacturers Record.

Very respectfully,

D. B. McKay,

Mayor of Tampa.

The growth of Tampa fully justifies the enthusiasm of Mayor McKay. Surrounded by a country of very great resources, sharing in the prosperity of Florida's West Coast, it is necessarily the point around which will center development of that richly-endowed section. Its growth during the last ten years has been remarkable, but the next ten years will probably show a still greater growth, for Tampa has passed far beyond what might be called the experimental stage in city life, and it has demonstrated that it is to be one of the progressive, prosperous cities of the country. No one can intelligently study Florida without being impressed with the fact that many of its towns and cities are exceptionally active and progressive, and that many of them will, like Tampa, grow far more rapidly in the future than in the past. All Florida is but in the infancy of its development. It is pressing on to sturdy youth and manhood. It is destined to glanhood in wealth and general progress, in winter tourist business, and in every line of activity suitable for a State of such varied resources.

Tampa aptly illustrates what the State is doing, and its future is typical of what the whole State will show in material advancement. Last year Tampa had a two-page descriptive article in our special publication "Thirty Years of Southern Upbuilding." According to the testimony of Tampa people, that was perhaps the best advertisement Tampa ever had in an outside publication, and the money expended is said by Tampa people to have been one of the best investments ever made by the city. The proof of how Tampa regarded that advertisement is shown in the letter from Mayor McKay, stating that, based on the experience then gained, the City of Tampa, through the City Council, has decided to take a similar space in "The South: The Nation's Greatest Asset."

diture in 1910 and the \$39,000,000 expenditure of 1911:

It will thus appear that a very material decrease in the amount of farm products shipped into the State has occurred since 1909. While the decrease is not, perhaps, as much as is indicated by the difference between the estimate of \$60,000,000 of 1909 and the actual amount of \$39,640,885.55 of 1911, still we feel that, in real fact, several millions of dollars have been retained in the profits of the farmers that but a few years ago would place in the Western banks to the credit of the Western corn, wheat, hog and cattle raisers.

The transformation thus indicated is likely to be fully accomplished with the spread of the spirit of co-operation in the State between town and country justifying the conviction that nothing short of a national calamity is likely to diminish the demand for products of the farms. For, as the bulletin suggests, though there is no city of the size of Baltimore calling for the bulk of farm products, there are many thriving cities and towns ranging in population from 3000 to 40,000 well distributed over the State and the seat of thriving industries.

GOOD INVESTMENT FOR TEXAS.

The 1911 and 1912 crop contests held under the auspices of the Texas Industrial Congress have cost \$45,000,000, including the \$10,000 awarded each year in prizes. In the 1912 contest 4030 persons in 205 counties of the State participated. Against a ten-year average for the State of only 19 bushels of corn to the acre, the best yield of corn last

year in the contest was 167½ bushels to the acre. The ten-year average of cotton for the State is a third of a bale to the acre. The highest yield in the 1912 contest was 2.38 bales per acre. The average of all the corn-growing contestants was 51 bushels to the acre, and of all the cotton-growing contestants 1.04 bales to the acre. Seventeen counties won prizes in 1911 and sixteen of them were included in the fifty-five counties which won prizes in 1912. These facts indicate that this annual contest is constructive, permanent and cumulative work. An observation made by Col. Henry Exall of Dallas, president of the congress, who, in a plea to business interests and citizens generally to give financial support to the 1913 contest, says, very truly:

Funds contributed to this work should not be looked upon as gifts, but as a rare opportunity for a wonderfully profitable investment. Better crops and greater net returns to the tillers of the soil mean not only a more prosperous, contented and happy farming community, but a vast increase of money with which to buy homes, to improve the quality of the live stock, for education that makes them fit to take advantage of opportunity, to buy necessary merchandise and even luxuries, to travel, to pay debts and to deposit in bank, adding a vast amount of new wealth for universal distribution and general betterment.

The MANUFACTURERS RECORD has regarded this enterprise of the Industrial Congress as one of the best investments of the kind in any Southern State. It has not only had the enthusiastic support of the press and business

organizations of the State and the endorsement of the State University in the establishment of scholarships for the benefit of a certain number of the prize-winners, thus encouraging a spirit of high emulation among the rising generation of farmers, but has also directed the attention of the country upon the great agricultural possibilities of Texas. For instance, the average yield of corn in Texas last year was 21 bushels to the acre. If the yield had been as great as the average made by the contestants, the total yield would have been 382,150,000 bushels, and Texas would have ranked in corn-growing third among the States of the country. The average yield per acre of cotton last year has not yet been definitely fixed. Even granting that it was a bale to the acre, had the average in the contest prevailed in the State, the total production in Texas would have been nearer 10,000,000 bales than 5,000,000 bales. The crop contests of the Texas Industrial Congress are thus demonstrating what Texas can do.

HOW TO RIVAL CANADA'S IMMIGRATION WORK.

Commenting on the movement of population from the United States to Canada, discussed in the MANUFACTURERS RECORD last week, the Savannah News and the Tampa Tribune have been presenting some interesting views on the subject, giving the reasons why the South has not drawn these people, who ought to have come to this section instead of going to Canada. On this point the Savannah News says:

Land in many sections of the South are cheaper than those in Canada, and they are easier brought into cultivation and farmed with less labor and expense. In fact, when compared with those of Canada, the opportunities the South offers the homeseeker are so much greater that one wonders why every available acre of land in this section is not taken.

The reason it is not is because the South's advantages are not generally known. It is largely a matter of advertising. Last summer and fall the Chicago and other large Western newspapers carried pages, and in some cases entire sections, devoted to the advertising of Canadian lands. Canadian real estate men, railroads and promoters spent large sums to lay the merits of their sections before the people of the Middle West and Northwest, and they had the co-operation of their Government. The homeseekers read, believed and emigrated. This country and the South lost and Canada gained.

The lesson has been an expensive one, but it should be a profitable one. Land owners, real estate dealers and railroads should co-operate in advertising the advantages of the South. Our people too often complain that the railroads do not advertise this section. The railroads should not be expected to do it all. The land owners must lend a helping hand.

The advice given by the News should be heeded. Savannah itself needs to follow the advice of the News and more widely advertise its progress and its attractions. Savannah is one of the most beautiful cities in America. It ought to draw many times the number of winter visitors it does. It is one of the great exporting cities of the country, and one of the greatest cotton-handling ports. But these facts are not made known as widely as they should be by the people of Savannah. If any city on the Pacific Coast had as much to boast about as has Savannah, there would not be a man in the United States able to read who would not know about it, its growth and its attractions. Savannah is entirely too well satisfied with itself, or else its people have not caught the vision of its possibilities to such an extent as to make them spend money to make these advantages

known. A few months ago when in Savannah the writer learned that two big automobile manufacturing companies in Indiana have been largely, if not mainly, financed by Savannah business people. And yet it is almost certain that there are many industrial interests, some probably in Savannah at present and some that could be located there, which would yield just as large a profit to the investors as these Western automobile plants are doing, and at the same time would build up their own city.

It is true, as the *News* says, that Canada has been successful in drawing American people because of the great advertising campaign which that country has so successfully conducted. The South, and every city in the South, and every business concern in the South ought to understand the essential importance of rivaling Canada's work for drawing men and money, Canada's advertising campaign has brought amazing results.

In discussing the subject of the lack of advertising by the South in connection with the movement of population from this country to Canada, the *Wilmington Star* says:

When this country is intelligently and systematically advertised we will find an influx of people here to purchase our lands and make them blossom like a rose. Eight hundred thousand Americans have gone to Canada, but they would have come South had we let them know the opportunities going begging in the Nation's Garden Spot.

And then, emphasizing the opportunities in the South which should be made known to the world, the *Star* gives the following interesting facts:

Lands are low priced in the South because they are plentiful, but those who do not buy before they are all taken up will find prices pretty stiff in the next few years. In the Sunny South Colony at Chadbourne there are settlers whose crops paid for their lands the first year, and that is not hard to explain when a farmer told us yesterday he netted \$1000 on two acres in strawberries in one lucky season. It is not everybody that makes a bale or two of cotton per acre, 117 bushels of corn per acre, or from \$250 to \$500 an acre in berries and truck, but farmers have proved that it can be done, and the right kind are doing it every year.

SOUTHERN COAL IN 1912.

Of the 550,000,000 short tons of coal mined in the United States in 1911, nearly 50,000,000 more tons than the quantity mined in 1910, a record-breaking year, about 131,000,000 tons, or about 24 per cent., of the total was mined in the South. In 1880 the South mined 9.8 per cent. of the total, but increased its percentage to 15.8 per cent. in 1890, to 20.2 per cent. in 1900 and to 24 per cent. in 1910. The South is now producing nearly three times as much bituminous coal as the whole country produced in 1880 and within 4,000,000 tons of the country's production as late as 1895. The South's annual production has increased since 1880 nearly twenty times, as against an increase of about eight times in the production of all coal in the whole country. This year's production in West Virginia, 66,700,000 tons, is more than half the present production of the South and within 4,000,000 tons of the total production in the country in 1880. The State increased its production in spite of labor troubles in the Kanawha district. Southwestern Virginia increased its production by probably as high a percentage as that reached in any other State or district. The year's output is expected to reach 9,500,000 tons. Alabama, with an output approximating 18,000,000 tons, makes a

new high record for itself, and the output in Maryland, Kentucky, Tennessee and Texas was about the same as in 1911. The output in Arkansas, Oklahoma and Missouri was about 9,000,000 tons. The aggregate for the South was in 1912 about 10,000,000 more tons than the output of 1910, which was the largest for that section up to that time.

NEED EVERY ISSUE.

R. M. Wiers & Co., stocks and bonds, 64 Wall street, New York, writing to the MANUFACTURERS RECORD on December 30, 1912, said:

Up to this writing we have not received our copy for last week, i. e., December 26. We hold such a high opinion of your magazine that we do not care to miss one issue.

Banking and investment houses, East and West, find the MANUFACTURERS RECORD as essential to them as it is to progressive bankers in the South.

FOR JACKSONVILLE'S COMMERCE.

Rounding out a notable piece of enterprise by a commercial body will be the election at Jacksonville, Fla., on January 21 to determine upon an issue of \$1,500,000 of bonds to secure municipally owned and operated docks and terminals for that city. A few years ago a 24-foot channel from the city to the sea was completed and the Jacksonville commerce grew so rapidly that an additional appropriation by Congress was secured for the purpose of getting a 30-foot channel. Work upon that now in progress will be completed in about 18 months. In preparation for further increase in the commerce of the port, municipal docks and terminals were deemed necessary. At the request of the Board of Trade of Jacksonville the Government of Florida called a special session of the Legislature for the sole purpose of passing an act enabling the municipality to operate and control its own docks and terminals. The act was passed on October 3.

COAL THROUGH PENSACOLA.

There is a marked tendency of export business from the Birmingham district, especially of coal through Pensacola. The latest Birmingham company reported to establish a Pensacola office is the Tennessee Coal, Iron & Railroad Co., which proposes to develop coal shipments through that port. Pensacola has lately voted \$400,000 of bonds for public docks for a belt line railroad.

At last, after many years of waiting, it looks as though that splendidly located city, with its great harbor, is about to realize the fruition of all its dreams and take rank in commerce—domestic and foreign—in keeping with its location its harbor, its proximity on one side to the Central South, and on the other to the Gulf of Mexico.

THE SOUTH'S PETROLEUM OUTPUT

Of the 220,200,000 barrels of petroleum produced in this country in 1912, the South produced close upon \$5,000,000, the output by States having been 52,000,000 barrels in Oklahoma, 11,800,000 in West Virginia, 10,500,000 in Texas, 10,000,000 in Louisiana and 500,000 in Kentucky.

Bluefield.

Mr. B. C. Banks, industrial agent at Bluefield, W. Va., of the Appalachian Power Co., is circulating a handsomely illustrated pamphlet issued by the Chamber of Commerce of Bluefield, setting forth details of a diversity of industrial activities centering in that city, whose population increased between 1890 and 1900 from 600 to 11,188.

TEXAS NEEDS RAILROADS.

Inadequate Facilities in Many Counties of the State.

[Special Cor. Manufacturers Record.]

Fort Worth, Tex., January 2.

Following the recent statement of the Texas Welfare Commission that the industrial development of the State had progressed about three times as fast as the transportation facilities, the Texas Commercial Secretaries and Business Men's Association compiled a railroad map showing the railroad mileage constructed within the State during the calendar year of 1912.

The map shows that only 153 miles of new line was constructed during the year, and that there are 32 counties within the State that have absolutely no railroad facilities. There are 10 counties that have less than 15 miles of railroad, while many other counties show inadequate railroad service. Thirty-eight of the counties having little or no railroad mileage are in the western section of the State, while four are located in the eastern section. Most of the counties without railroads have shown a remarkable growth during the past few years even without the aid of railroads, thereby demonstrating their almost unlimited possibilities when adequate transportation facilities shall have been provided. Thirty-seven of the counties out of the total of 42 have increased in population during the past decade from 2 per cent. to 7700 per cent., and their combined area is as great as that of the State of Ohio. The combined population of these counties is 111,800, and the total assessed value of property within their borders is \$120,000,000. The annual farm production in these counties is valued at approximately \$10,000,000. There was only one county which heard the first whistle of a locomotive within its borders during the year, and that was McMullen, situated in the southwestern part of the State.

A glance at the map discloses the fact that the Panhandle and Central sections of the State, where railroad facilities are more badly needed than in any other part, are without any new railroad projects whatever, and the eastern portion of the State fares very little better. The southern portion of Texas, however, is witnessing a fairly normal amount of railroad construction, due largely to the heavy bonuses offered by cities along the proposed routes of the new roads.

It will be recalled that the Welfare Commission, after investigating the railroad situation in Texas recently, asked that the stock and bond law be repealed in order that railroad construction might be hastened.

Sugar Beets in England and Germany

Editor Manufacturers Record:

The first sugar-beet factory for the making of beet sugar in the United Kingdom began crushing beets in November, 1912, at Cantly, in Norfolk. The beet crop will be about 40,000 tons, and the yield of crystal white sugar for table use will approximate 5000 tons. The by-products of beet tops, greens and evaporated beet pulp and molasses, will be utilized in feeding sheep and cattle for the home market.

Beet culture in rotating with other crops improves the soil and increases the yield of cereal crops in Europe. The above is a private venture by landowners who are using German capacity.

The British policy is that of free trade in raw products, of making the United Kingdom the world's great manufacturing workshop for the world, and carrying the manufactured products under the British

flag. This is the tariff policy of Great Britain.

The German tariff policy since the days of Bismarck has been one of protecting every agricultural and manufacturing interest of the Fatherland. Mountain streams are changed into navigable waterways, the German flag dots the seas. In 1903, 78,300 tons of beet sugar from Germany entered Canada in competition with British owned cane sugar.

In the year 1853 the world's crop of beet sugar was 200,000 tons. In the year 1910 the world's crop of beet sugar was 7,963,000 tons. The American home-made sugar crop in 1911 was as follows: From sugar-cane 400,000 tons and from sugar beets 600,000 tons. The American nation has never adopted any tariff policy outside of partisan politics. We are looking to the incoming administration to give us an American tariff policy that will prove stable and satisfactory at home and enable us to extend our trade abroad. Nothing short of this will maintain the incoming political party in power.

A. E. KENNEDY.

Monroe, La., January 2.

Progress at Shreveport.

Chamber of Commerce,

[Special Cor. Manufacturers Record.]

Shreveport, La., January 3.

In 1912 bank deposits at Shreveport increased 18 per cent., the amount on hand December 31, 1912, being \$12,891,993, as compared with \$11,771,940 one year ago.

Building permits issued increased 21 per cent., the total for 1912 being \$1,514,629. This does not take into account the building done outside the old city limits.

The city's paved street mileage increased to 47 miles. The first 25 miles of a 125-mile system of paved roads in Caddo parish were finished in the 1912 season.

An election has been ordered by the city for February 4 to vote upon \$50,000 bonds to buy additional ground for the State Fair, which is held at Shreveport every fall. It is probable that another issue of either \$150,000 or \$200,000 worth of bonds will be voted upon at the same time for various municipal improvements.

Shreveport is extending in every way. Its position at the head of navigation on the Red River, where the transportation lines of four States meet, is unique. Only the other day the Cumberland Telephone Co. reported that a house count of Shreveport showed its population had increased 20 per cent. in the last two years.

E. L. McCOLGIN, Secretary.

Princess Furnace Blown In.

The Princess Furnace Co., Real Estate Trust Building, Philadelphia, writes to the MANUFACTURERS RECORD regarding its iron furnace at Glen Wilton, Va., as follows:

"The Princess furnace blew in on December 31. The furnace stack, casthouse, hoist tower and down corner of the furnace were destroyed by an accident on September 1. In four months the furnace has been rebuilt from the ground up. A new furnace shell, new hoist tower, new and improved dust catchers and down corner designed by J. T. Hunter, Roanoke, Va., and a new casthouse have been built. In addition to these, a new stove has been erected, so that practically the entire plant has been rebuilt in four months. Everything in connection with the plant has been made much stronger and heavier. We believe that today the Princess furnace outfit is the best of its size in Virginia."

Financial Deals in Baltimore.

TWO MERGERS, INCLUDING FOUR LARGE INSTITUTIONS AND REPRESENTING ABOUT \$40,000,000—
OTHER FINANCIAL STRENGTH.

Baltimore has recently witnessed several large financial operations which have commanded much more than local attention and attracted the consideration of outsiders to the strong position of its monetary institutions as well as to the thrifty disposition of its people, evidenced by the swelling resources of the savings banks. The aggregate of these operations is \$40,000,000, of which more than \$27,000,000 is represented in the merging of two of Baltimore's largest banks, \$12,000,000 in the consolidation of two great bonding companies and \$1,000,000 in the organization of a new trust company, all these deals happening within practically not more than a month.

A material strengthening of the city as a financial center is accomplished by the bank merger, which will enable the new institution thus formed to handle much larger transactions than were possible to either of the two banks when operating independently. There is a large increase in the total capital and a corresponding enlargement of the surplus. Combined they amount to \$4,000,000, and this feature marks the bank as a notable concern even without considering its wide business connections through a large board of directors who will be able to add to and constantly increase its field of usefulness and profit. The bonding combine is also of value to the entire community, which is known as the home of the surety business in this country. It will give Baltimore a new concern of great resources that will inspire confidence and materially assist in obtaining business. The trust company will likewise be of conspicuous advantage. It will have wide and important connections, and will doubtless prove successful from the beginning. Its stock has been oversubscribed, and in the market it is sold, "when issued," at a premium.

The bank consolidation was announced just prior to December 1. It was then stated that the directors of the Merchants' National and Mechanics' National, two big banks on South street, had agreed to recommend to their stockholders that the two institutions be merged under the name of the Merchants-Mechanics' National Bank, and this has since been accomplished, the new concern thus formed now transacting business in the building of the Merchants' Bank at the southeast corner of South and Water streets. Predictions as to the total resources and the deposits of the present bank were exceeded, as is shown by a statement just issued.

The Merchants' Bank had \$1,500,000 capital and \$900,000 surplus, with about \$12,000,000 deposits. The Mechanics had \$1,000,000 capital, \$1,000,000 surplus and about \$7,000,000 deposits. Respectively, their presidents were Douglas H. Thomas and John B. Ramsay. Mr. Thomas is president of the new bank and Mr. Ramsay is chairman of its board of directors. The merger plan met with immediate favor, and advances in the price of stock resulted, especially that of the Merchants, whose shareholders received a liberal distribution of cash in equalizing matters to close up the deal. Financial details were attended to by Alexander Brown & Sons of Baltimore, which old banking-house was represented on the board of each of the banks. Each concern had a fine building, and while that belonging to the Mechanics' Bank is left vacant (except for

some rented offices) in consequence of the merger, it is improbable that it will remain long idle, for it is a new structure of white marble centrally situated and handsomely finished within. The Merchants' Bank building, in which the new bank is now housed, is of granite, and the interior is also beautiful and commodious. Both edifices are fireproof.

The statement of the Merchants-Mechanics' National at the close of business January 2 shows total resources of \$27,405,792, which include cash \$5,165,837 and loans and discounts \$14,451,786. The deposits are \$21,670,256. Capital is \$2,000,000, surplus \$2,000,000 and undivided profits \$173,936. The directors are 26 in number. When separate, the banks had a total of 27 directors, of which 7 were of the Merchants' Bank and 20 of the Mechanics. In the new board are all of the former directors of the Merchants and all but two of the Mechanics. One of the latter was dropped and a new man was chosen in place of the other. The new board consists of the following: Douglas H. Thomas, president; John B. Ramsay, vice-president and chairman of the board; William Ingle, vice-president; Francis E. Waters, Alexander Brown, Charles A. Webb, George C. Jenkins, D. D. Mallory, John S. Gittings, Miles White, Jr., George K. McGaw, Summerfield Baldwin, Jr., E. B. Hunting, W. Bladen Lowndes, Jere H. Wheelwright, David Hutzler, Lawrason Riggs, Austin McLanahan, Morris Whitridge, Seymour Mandelbaum, W. S. Hilles, James L. Seilman, Samuel C. Rowland, J. C. Fenhagen, Wm. Wallace Lanahan and John K. Shaw. The officers other than those who are members of the board are John B. H. Dunn, cashier; Charles Hann, J. Cleveland Wands and Robert H. Welsh, assistant cashiers. All of the directors are men who have been for some time prominent and well known in the business affairs of the city.

As for the surety company deal, it is in process of accomplishment. This is for the consolidation of the Fidelity & Deposit Co. of Maryland and the American Bonding Co., both in Baltimore, and among the most prominent surety companies in the United States. The Fidelity & Deposit Co. has \$2,000,000 capital and the American Bonding Co. \$750,000 capital, the par of the former being \$50 and of the latter \$25. It is proposed to increase the capital of the Fidelity to \$3,000,000 to permit the absorption of the American Bonding Co. This will give total resources in the new company amounting to nearly \$12,000,000. The total assets of the Fidelity & Deposit Co. at present are more than \$8,600,000 and those of the American Bonding Co. nearly \$3,000,000. Edwin Warfield, a former Governor of Maryland, is president of the Fidelity & Deposit Co., and George Cator is president of the American Bonding Co. The directors of each company have agreed to recommend the merger to their stockholders, and action thereon is expected at the regular annual meeting this month. In the new company it is proposed that Mr. Warfield be president, while Mr. Cator will be chairman of the board and a vice-president.

Concerning these companies it may be said, as of the banks, that each is a highly successful concern, but that the benefits to be obtained from the merger in the way of greater efficiency and economy

are the principal inducements which have led a majority of the stock to give its assurance of success for the plan. It promises, moreover, material increases in income on the business transacted, as well as more business and greater profits to the shareholders. As compared with par value the stocks of the two companies have been commanding about the same price in the market, with dividends at the same rate of interest. Also, like the banks, it is expected that the merger will result in a number of present officers and directors (practically all of them) entering into the larger new company, which will hold the name of the Fidelity & Deposit. Details are yet to be arranged, and it is possible that special meetings of stockholders may be called to facilitate the transaction.

The Munsey Trust Co. is the name of the million-dollar financial institution, which will have its offices in the handsome building erected by Frank A. Munsey at the corner of Calvert and Fayette streets on the site of the News Building and adjoining structures. Mr. Munsey, who lives in New York, will be chairman of the board of directors, and other members will be Stuart Olivier, George R. Gaither, R. Lancaster Williams, Jacob France, T. Rowland Thomas, E. L. Norton, A. R. L. Dohme, H. Fessenden Meserve, John L. Alcock, Elmore B. Jeffery of Baltimore and others. Mr. Norton will be president, T. H. Worthington treasurer and D. Stewart Ridgely assistant treasurer. It is announced that there will be altogether 25 directors, and it is anticipated that some New Yorkers other than Mr. Munsey will be on the board. Business is to begin about January 15 if expectations are realized.

In connection with this description of recent financial accomplishments in Baltimore it is important to note the strength of the city's excellent savings institutions. These banks are now publishing their annual statements, which reveal that they now have funds on hand amounting to more than \$100,000,000. Of this amount, practically \$84,000,000 is in four of the savings banks, the Baltimore having over \$36,000,000, the Eutaw nearly \$27,000,000, the Central nearly \$11,000,000 and the Hopkins Place more than \$9,000,000. There are several others of these banks having from \$5,000,000 to \$6,000,000 each, bringing the total up to and even above the round figures first mentioned. How rapidly money accumulates in the savings institutions is displayed by the fact that the Baltimore gained more than \$1,000,000 since this time last year, and the Eutaw about \$900,000. Others grew in proportion.

The Birmingham Iron Market.

[Special Cor. Manufacturers Record.]

Birmingham, Ala., January 6.

The local pig-iron market is quiet, comparatively, but decidedly more active than at the time of last report. Asking prices for all of the several brands are practically the same as were being asked in the last quarter of the old year, and the same attitude is generally manifested by the producing interests; however, the trade has specified even heavier shipments for the first quarter, and is more concerned in advanced requirements than at any time for weeks past. The aggregate of all sales made in the past week is probably less than 5000 tons, and the trading covered a wide range of territory. The largest requirement placed in the week was for 2500 tons of analysis iron, aside from which, carloads and 100 to 150-ton lots were the considerations. For the analysis iron sold figures around \$15 per ton at Birmingham, or a basis of \$14.50 per ton for No. 1

2 foundry, were received, and for the smaller lots the prices ranged from \$14.25 to \$14.75 per ton for No. 2 foundry. The entire tonnage placed is for comparatively early delivery, although it is understood that the prices named could have been applicable to the entire first half. There is more or less tonnage pending for first half delivery, and considerable additional tonnage has recently been offered for delivery in the last half, with the privilege of covering the entire year. Such requirements, however, have not interested the producers to such an extent as to result in concessions, and as a result the largest tonnages offered are still pending. With the majority of the producers considerably behind with last year's commitments, and specifications against new contracts fully equal to expectations, the situation is still largely in the furnace companies' hands. Yet the condition of furnace order-books can but indicate a very liberal provision on the part of the trade, and the result of the period of inactivity that is now being gone through remains to be seen. The furnace output is very close to maximum figures, and the additions proposed have not been abandoned in any case. To the capacity now in blast, one additional stack is to go in blast at North Birmingham; the Oxmoor plant is being rehabilitated, and the new furnace of the Woodward Iron Co. is to be completed within the next three months. The local consumption is still short of normal, owing to the idle capacity at certain of the large pipe plants, but these conditions are expected to change at least within the present month. The market is considered firm, but without sufficient trading to determine actual selling prices other than for immediate requirements. We quote the several grades as follows per gross ton f. o. b. cars here, viz.: No. 1 foundry, \$14.50 to \$15; No. 2 foundry, \$14 to \$14.50; No. 3 foundry, \$13.75 to \$14.25; No. 4 foundry, \$13.50 to \$14; gray forge, \$12.25 to \$13.75; mottled, \$13.25 to \$13.75; standard basic, \$14 to \$14.50.

The above schedule applies to deliveries in the first half of the year, without a quotation for shipments farther advanced. The price quoted for charcoal iron has just been received for 2000 tons of chilling grades, and the order-books of the producers of such grades are in such condition that the price named can be fully maintained during the remainder of the year.

The old material market has handled a very satisfactory tonnage in the past 10 days, although, owing to the scarcity of certain grades, considerable tonnage has necessarily been placed in other directions. The local schedule of asking prices is about the same as has been asked for some weeks past, but all grades are offered subject to prior sale, and to the existing local conditions at the time inquiry is received. Nominal asking prices per gross ton f. o. b. cars here are about as follows, viz.:

Old iron rails (light), \$15.50 to \$16.
Old steel axles (light), \$15.50 to \$16.
Old iron rails, \$15.50 to \$16.
No. 1 railroad wrought, \$13.50 to \$14.
No. 2 railroad wrought, \$11 to \$11.50.
No. 1 country, \$9.50 to \$10.
No. 2 country, \$8.50 to \$9.
No. 1 machinery, \$11.50 to \$12.
No. 1 steel, \$11.50 to \$12.
Tram car wheels, \$11 to \$11.50.
Standard car wheels, \$12.50 to \$13.

In the cast-iron pipe market the demand for the smaller sizes continues very satisfactory, but there is quite a scarcity of orders for the larger sizes, and accordingly the aggregate tonnage placed is reduced. The city of Portland, Ore., is soon to enter the market for 6000 tons of

water pipe and 1000 tons of fittings, aside from which no large municipal requirements are pending. The tonnage being required for extension work and for railroad construction is hardly equal to the production after taking care of regular contract requirements, and stocks are being accumulated. Quotations, however, are being adhered to very firmly, and unless a reduction in the asking price of pig-iron should become effective, the present level will no doubt be maintained. Water pipe is quoted as follows per net ton f. o. b. cars here, viz.: Four-inch, \$24.50; six-inch and up, \$22.50, with \$1 per ton extra for gaspipe. These prices are being adhered to for such business as is being placed, and would probably not be shaded for larger municipal contracts.

The railroad requirement of steam coal is being furnished at a more satisfactory rate, and, due to the mild weather in the past 10 days, the domestic situation is easier. At the operations, cars are still not being received with any degree of regularity, and the aggregate surplus accumulation at the various municipal and industrial plants is being gradually reduced. The level of prices is about the same as for some 10 weeks past, owing to the fact that practically all tonnage that can be furnished is due on a previous contract, and that no tonnage is being offered on a spot market. Standard Alabama foundry coke has advanced to \$4 to \$4.50 per net ton at ovens, and is being maintained at such figures. Furnace coke is bringing \$3.50 to \$3.75 per ton at ovens, while the by-product in regular sizes is bringing \$3 to \$3.25 per net ton. The output of this last is soon to be increased materially by the completion of the new battery of ovens at the plant of the Woodward Iron Co., although from present indications it is quite probable that by that time the shortage of furnace coke will be even more acute.

The finishing mills are operating to a greater extent than at the time of last report, and are forwarding very largely against old contracts. So far as is known, no change in prices has been made in the past few weeks, but this is due to the fact that practically all of the local product has been engaged and is required for commitments already entered.

MODEL NEWSPAPER PLANT.

Louisville Courier-Journal and Times in Their New Home.

[Special Cor. Manufacturers Record.]
Louisville, Ky., December 26.

One of the oldest and most influential newspapers, not only in the South, but the entire country, the *Louisville Courier-Journal*, with its junior afternoon companion, the *Louisville Times*, recently moved into a roomy and splendidly equipped new home and plant. The building itself is not a new one, having stood for something like 60 years, but, like the great paper it will house, it has the dignity of age with the improvements of the last minute.

A splendidly sturdy stone structure, with four-foot walls of Kentucky limestone, the building was erected and used for years as the Federal postoffice and general offices, but was left vacant when the new Government building was occupied some years ago.

The stone walls are as strong as the day they were built, but the architect, John B. Hutchings of Louisville, in order to reconstruct the interior to suit the purposes of the new occupants, considered a clean sweep necessary, and from room to basement everything was torn out, and only the shell left standing.



NEW HOME OF LOUISVILLE COURIER-JOURNAL.

The new construction of the interior is of Bethlehem steel and reinforced concrete. All floors and the roof itself are monolithic slabs, reinforced two ways where practicable, and the roof is covered with Barret specification roofing. The floors are covered with maple, laid on yellow pine sleepers embedded in cinder concrete. The lobby, toilets and halls, however, are floored with mosaic tile.

In the northeast corner of the building, on the first floor, 2700 square feet are given over to the business office, while in the southeast corner, directly back of this, the first floor is cut out, and with 40 feet of clear space, running from the basement floor to the first-floor ceiling, the three great presses, each capable of turning out 30,000 papers an hour, are established. The ceiling over them, which is also the second floor, is supported on five steel-plate girders 43 feet long, 6 feet 6 inches deep, and with top and bottom flanges 18 inches wide, each weighing 20,000 pounds. These rest on columns, which, in turn, are carried on a grillage of six 26-inch 160-pound Bethlehem girder beams, encased in concrete and supported by four reinforced concrete footings.

Structural steel to the amount of 450 tons was used in the building, which was built with a view to approaching the absolutely non-inflammable as nearly as possible. With solid masonry walls, concrete roof and floors, and steel construction throughout where concrete is not used, there is little to burn. On the fourth floor, where the composing and stereotyping rooms are, with 30-foot ceilings, great windows on three sides and ample skylights giving working daylight as long as daylight lasts, the fireproof idea is carried to the placing in the stereotyping department of cast-iron plate floors embedded in grout over the concrete slab.

All wiring is passed through metal conduits, which, in turn, are embedded in the cinder concrete under the wood floors. There is no power plant in the building, current for the operation of the presses and other machinery being furnished by one of the central stations. The papers are not entirely dependent upon this supply by any means, however, as wires are run from the power plant in the old build-

ing, which must be operated for the convenience of the office and store tenants housed there, ready at a moment's notice to be turned on for the new. Steam heat is also supplied from the old building, which is less than 200 feet away.

On the fourth floor are installed the 21 Mergenthaler linotype machines, the plate-casting equipment, the cases and racks of the composing-room and a type-making machine, the whole making a tremendous weight, with reference to which the floors and columns were particularly designed. A dumbwaiter arrangement shoots the finished plates straight down to the presses, so that the apparent remoteness of the make-up department does not delay matters.

A device which seems to be unique in newspaper plants is the overhead conveyor, working on the usual endless-chain system, which carries the papers from each press to the mailing-room, on the first floor directly west. After much experimenting the conveyor was perfected, and is in highly successful operation. The papers are placed in bundles of 50 on a rack, caught by the carriers, which hold them in place by two upright pins on each side, and are swung along easily and securely underneath the frame which supports the chain, over the pressroom and down on the other side to the mailing-room. One man at each end does the work, which formerly required the services of several husky youths in carrying stacks of papers from the presses to the mailing tables. Each conveyor can handle as many papers as the press with which it works will turn out—that is, about 30,000 an hour. The device was erected and the material furnished by the Dow Wire and Iron Works of Louisville.

The two papers moved into their new quarters several weeks ago, and have been getting settled since. The moving itself was an operation of no little interest, considering the weight of the machinery which had to be moved between the time the last *Courier-Journal* plate left the make-up room one morning and the hour when work must begin on the *Times* the next afternoon. The thing was done, however, and the thousand cogs and wheels which go to the making of two big

dailies are now doing their work in their new quarters as if they had always been there.

A formal opening is to be held early in January, at which time the public will be permitted to inspect the entire plant. The finishing touches in the way of superficial decoration and beautification are now being completed, but the plant has been doing business for some time.

G. D. CRAIN, JR.

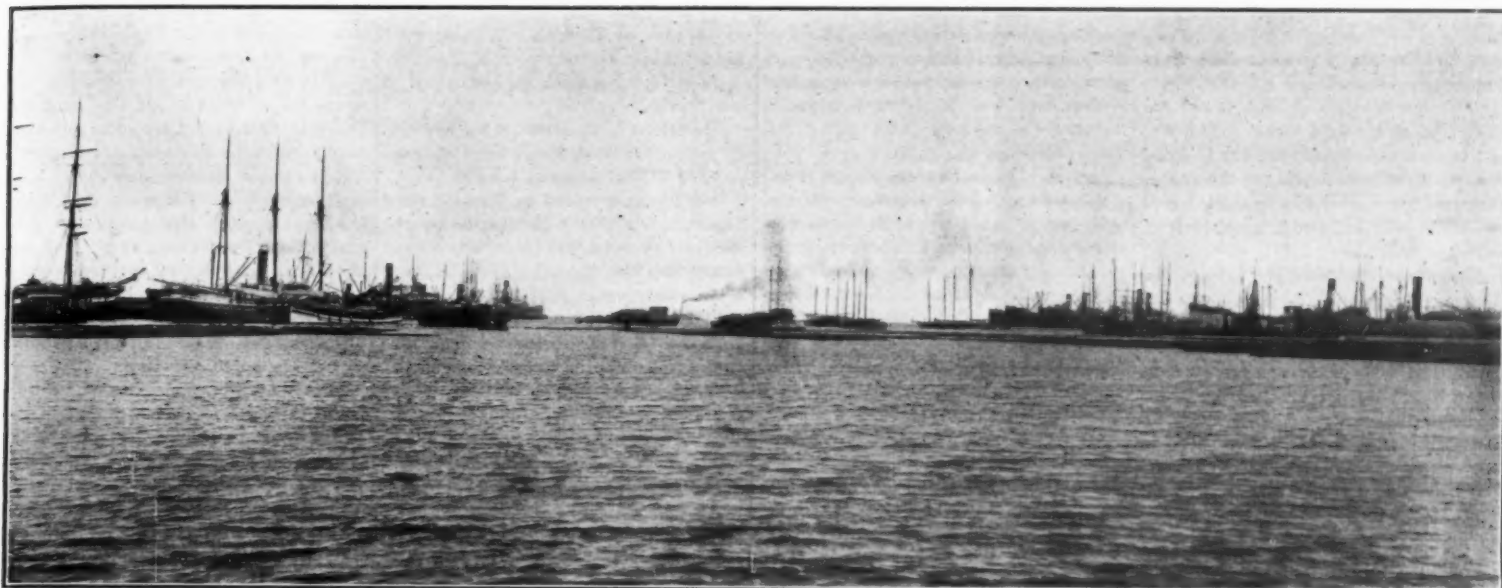
Alabama Water-Power Development.

In an effort to induce President Taft to withdraw his disapproval of a bill passed at the second session of the present Congress so that the improvements of navigation of the Coosa River and the development of its water-powers may not be held up, the Chamber of Commerce of Birmingham has adopted an address to the President setting forth the reasons why legal differences as to the power of the Federal Government over the development and use of water-powers within the limits of the States should be left to the determination by the courts. The address insists that the navigation and power development in the navigable streams in the various States should not be delayed or hindered, but that both the legislative and executive departments of the Government should in every way possible encourage these developments under the present dam laws until those laws are amended or repealed. It contends that loss to the people of Alabama will occur should the work on the Coosa River be held up, and also loss to the United States Government, and it expresses appreciation of the constructive purposes and plans of the Alabama Interstate Power Co. and the Alabama Power Co. to build high power dams in the Coosa River, thereby improving navigation and developing valuable water-power and contributing largely to the industrial growth of Alabama.



STATE NATIONAL BANK BUILDING, FORT WORTH, TEX.

To be erected at 4th and Main streets; 50x95 feet; 12 stories; reinforced concrete fireproof construction; brick, stone and terra-cotta trimmings on exterior, with marble columns; marble wainscoting on interior; two electric elevators; cost \$300,000; construction begun; architects, Sanguinet & Staats; contractors, Buchanan & Gilder; both of Fort Worth.



GULFPORT HARBOR LOOKING DOWN THE CHANNEL TOWARD THE GULF.

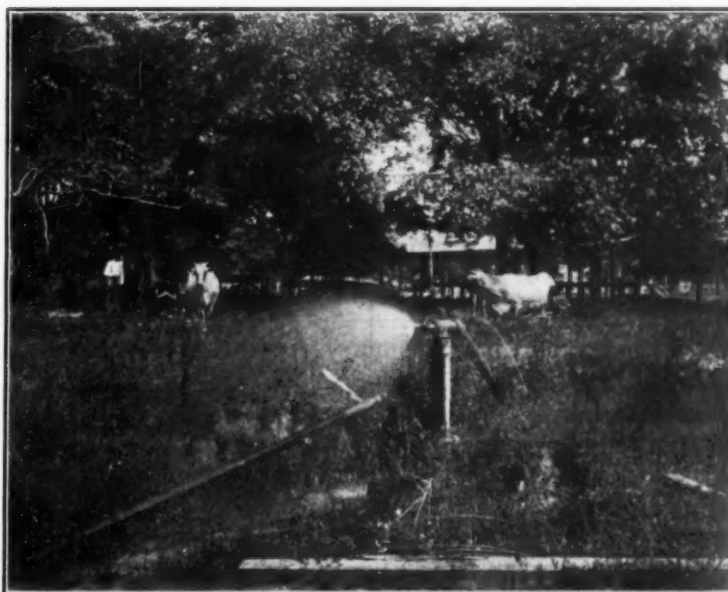
GULFPORT AND VICINITY.**Commercial and Agricultural Development in Recent Years.**

[Special Cor. Manufacturers Record.]

Gulfport, Miss., December 29.

Fifteen years ago there was no Gulfport, in the sense that Gulfport is today. Then came Capt. J. T. Jones of Buffalo, N. Y., and with his coming there arose a city out of the depths of the forest that bordered the Gulf of Mexico. Soon the Gulf & Ship Island Railroad was built, and the marts of the world began to hear of Gulfport.

Ten years ago the first ship to enter the new port came from Genoa, Italy. Today the roadstead and basin of the harbor are crowded at all times with ships from all over the world. There is available today at the lowest stage fully 22 feet of water, permitting vessels of more than 20 feet draft to enter the basin. With the \$200,000 additional appropriation recently made by Congress the channel will be dredged to a depth of 26 feet, and this will permit freight vessels of about



FLOWING ARTESIAN WELL IN PECAN GROVE WITH JERSEY CATTLE NEAR GULFPORT.



A SATSUMA ORANGE GROVE NEAR GULFPORT.

the deepest draft to enter the harbor and reach the Gulf & Ship Island piers, one of which is more than a mile in length.

Gulfport's population was 1060 in 1900. The census of 1910 gives Gulfport 6386 in its corporate limits. Not counting anything in the way of natural increase for a growing town as is Gulfport, this does not really make the showing for the city as should be made, for there are suburbs

holding several thousands of population. Then there are Long Beach, whose limits join those of Gulfport; Mississippi City joins on the east, and just a mile northwest is the town of Handsboro. All of these places, while not integral parts of Gulfport, yet can reasonably be said to comprise a part of the port, and such is the propinquity that some day in the not distant future they will become one.

One finds here, first, a perfect sanitary sewerage system, drainage that is unexcelled anywhere, fine, palatable, pure artesian water in abundance, splendid hotel facilities, a modern electric lighting system, furnishing also power at extremely reasonable rates, miles of paved streets and sidewalks, handsome, substantially built office structures and stores with



UPLAND RICE NEAR GULFPORT.

modern fronts and awnings and ornate facades, and electric fire-alarm system. The city owns its water-works, and this month will witness the installation of the new city government under the commis-

sion form with W. H. Bouslog, a native of Indiana, as Mayor.

Aside from what has been done for Gulfport and what Gulfport has done and is doing for herself, there is much to tell of the development of the country that lies back of the port and the shores of the Gulf. There is the naval stores industry, for instance, there being established about six miles north of Gulfport the Yaryan works that manufacture from the pine stumps and logs from cut-over lands, resin, spirits and pine oil. This industry has been recently exploited in an issue of the MANUFACTURERS RECORD in the account of the sister plant at Brunswick, Ga. As to nearby agriculture, just what can be done and what has been obtained from this Southeast Mississippi soil, so long neglected, are indicated in the reference of J. W. Wilson, a practical farmer of many years' experience. From one and one-half acres of this Mississippi soil near Gulfport, according to figures given by him, he made:

"On 22 barrels of radishes received net \$250.88; on 26 barrels of radishes received net \$162.40; on 62 barrels of radishes received net \$504.14; total \$917.42 from 110 barrels. The radish crop runs from 50 to 90 barrels the acre. After gathering and marketing this crop an acre was planted to cabbage, from which was realized \$400, making a grand total of \$1240.07 from one and one-half acres. There is not an acre of land here that won't produce, with intelligent, intensive

cultivation, at least \$200. Plant it any way you please. On our farm we grow some crop continuously throughout the year. Four crops from each acre, all on the same land. Two crops, first of rad-

ishes, then one of tomatoes, one of cow-peas."

A Mr. Inglish, who came here from Youngstown, O., says:

"I bought 40 acres of land, and at the end of the first year I lacked only \$1000 of having my land paid for; this included also my farm implements. At the end of the second year, with this 40 acres, I paid the \$1000 debt and put in bank, clear of expenses, \$5040."

The pecan, the Satsuma orange, the Japanese persimmon, the grapefruit and corn are raised here. Indigenous to this soil, having been found here in abundance more than 300 years ago by the first French to penetrate thus far south, the pecan furnishes the staple foundation for independent fortune in 15 years, that is, the grafted variety, of which 27 trees to the acre is the standard number. By the fifteenth year each tree will be producing, so the statisticians of this section aver, 100 to 150 pounds. They sell readily in any market at prices ranging from 55 cents to \$1 and \$1.50 a pound. Here are some pecan crop figures of this year: F. H. Lewis shipped 10,000 pounds to Europe, receiving \$1 a pound. Mr. Stewart sold 64 pounds recently to a New York hotel at \$1.50 a pound, these being fancy selects. Colonel Money of Ocean Springs is said to have sold his entire crop this year at \$1 a pound. These were all the thin paper-shell variety. The native growth seedling does not bring nearly so good a price. C. F. DRAKE.

SOUTHERN BUILDING IN 1912.

Many Millions of Dollars Spent in the Cities and Towns.

The value of Southern and Southwestern building operations probably reached a higher mark in 1912 than was ever attained in any previous year. In some localities there has been a decrease both in the number of permits issued and the cost of construction as compared with previous years, while in others there has been a decrease in the number of permits issued, but an increase in the cost of construction. In most of the representative cities, however, there have been material increases in the number of permits and the cost of construction. The higher cost of construction is due in a measure to an advance in the cost of building material, but is more especially due to remarkable expansion of business which demands the most modern buildings and facilities.

A total of 912 permits for new structures was issued in Richmond during the year, representing a cost of construction of \$5,748,198. Permits for alterations and repairs aggregated 719 and represent a cost of construction of \$507,513, making the total cost of construction \$6,255,711. As compared with 1911, these figures show an increase of about \$150,000. Details for many cities follow:

Nearly \$3,000,000 is the estimated cost of construction for which permits were issued in Norfolk. This estimate does not include structures erected in the suburbs, in some of which costly residences were built. Operations were particularly active during December, which is usually a dull month.

In Asheville, N. C., permits were issued in the city limits for construction estimated to cost \$420,287, but outside of the city and in the immediate vicinity the cost of new construction undertaken will probably amount to more than \$1,000,000. The most important structure started is the Grove Hotel, to cost about \$500,000.

Operations in Winston, N. C., aggregated \$928,690, exclusive of operations in Salem, Centerville and Southside. An

important feature was the number of dwellings erected, activity along this line not being confined to any particular part of the city. Among important structures erected were those of the R. J. Reynolds Tobacco Co., Mengel Box Co., P. H. Hanes Knitting Co., B. F. Huntley Furniture Co., Ideal Dry Goods Co., First Presbyterian Church, and other buildings. The cost of construction for which permits were issued in December was approximately \$20,000.

The cost of construction for which permits were issued in Charlotte was estimated at \$971,109. As compared with 1911, these figures show a decrease of about \$140,000.

In Greensboro, N. C., a total of 132 permits was issued, representing a cost of construction of \$387,510. As compared with 1911, these figures show a decrease of 26 in the number of permits, but an increase of about \$40,000 in the cost of construction. Operations in 1912 included 91 residences, costing \$219,355; 129 business buildings, \$109,155, and seven schools, \$59,000.

Building improvements in Charleston, S. C., were valued at approximately \$2,500,000, including buildings completed and improvements along the water-front, begun or now well under construction. The latter include the Clyde Line terminals to cost \$500,000; Consolidated Light and Power plant, \$500,000; Oakdene cotton compress, \$500,000; Charleston Terminal Co. warehouses and team-yard, \$109,000; immigration station, \$62,000, and other construction. It is estimated that the waterfront improvements will cost \$1,939,500.

It is estimated that operations in Sumter, S. C., aggregated \$600,000 in value.

The cost of construction for which permits were issued in Greenville, S. C., was estimated at \$586,557. This included the erection of residences costing \$260,850; business buildings, \$257,170; stables and garages, \$8783, and alterations and repairs, \$59,754.

In Atlanta permits were issued for construction estimated to cost \$9,987,444. As compared with 1911, these figures show an increase of \$3,662,444.

Columbus, Ga., experienced one of its most active years during 1912. It is estimated that \$3,500,000 has been expended in new buildings and other developments. Among important structures erected are an addition to the Meritas Mills Co.'s plant, costing \$360,000; addition to Columbus Manufacturing Co.'s plant, \$100,000; concrete bridge over Chattahoochee River, \$200,000; dam and power plant for Columbus Power Co., \$2,000,000; Bibb Manufacturing Co.'s addition, \$50,000; B. H. Hardaway residence, \$50,000; B. S. Miller residence and improvements, \$45,000; Lewis store, \$50,000; Racine Hotel addition, \$25,000, and other buildings.

Permits were issued in Macon to the number of 507, representing \$1,085,777. This included the erection of 30 brick stores, costing \$151,517; 7 frame stores, \$4925; 8 brick dwellings, \$42,350; 221 frame dwellings, \$401,015; 32 public and business buildings, \$342,161; 141 additions, \$114,430, and 68 miscellaneous structures costing \$29,379.

Operations in Augusta were valued at \$1,060,937, an increase of more than \$500,000 as compared with 1911. The value of construction for which permits were issued in December was estimated at \$257,348. Among the structures erected during the year were 11 warehouses, 5 hospital buildings, 156 cottages, 9 stores and 17 brick residences and 84 frame residences.

A total of 3412 permits was issued in Birmingham, representing \$3,813,079. As

compared with 1911, these figures show an increase of \$258,922. A feature of Birmingham's operations was the erection of 947 frame residences, estimated to cost \$1,807,335.

Operations in Bessemer, Ala., were estimated at \$73,395, an increase as compared with 1911 of about \$24,000.

Permits were issued in Pensacola for approximately 200 buildings during the year, the cost of construction being about \$600,000. For December permits were issued to the value of \$18,810.

In Miami the cost of construction was estimated at \$2,030,700. Of this total \$9650 represents the cost of water mains, \$525,500 cost of business buildings, \$315,500 cost of residences, \$815,000 cost of sewers, \$291,250 cost of streets, \$249,500 cost of churches, schools and club buildings, and \$114,000 cost of hotels.

An increase of 22 per cent. in the value of building construction in Memphis, as compared with 1911, is indicated by the annual report of the building inspector of that city. A total of 3658 permits was issued in 1912, as against 3213 in 1911. The estimated cost of construction in 1912 was \$7,159,214, as compared with \$5,859,146 for the previous year. In December a total of 288 permits was issued, representing a cost of construction of \$371,156.

The cost of construction for which permits were issued in Nashville was estimated at \$1,388,243, an increase of about \$60,000 as compared with figures for 1911. Operations in December were valued at \$125,819, an increase of approximately \$93,000 as compared with the corresponding month last year.

Much greater activity prevailed in Knoxville during 1912 than in the previous year. In 1912 permits were issued for construction estimated to cost \$756,928, an increase of \$187,831 as compared with 1911. The most important structure for which a permit was issued in 1912 was the Holston National Bank building, to cost \$360,000.

Operations in Louisville exceeded those of 1911 by \$423,089. A total of 2379 permits was issued, representing a cost of construction of \$6,522,730. July was the banner month of 1912, when permits were issued to a value of \$1,075,910.

Permits were issued in Shreveport, La., to a value of \$1,514,629, an increase of about \$250,000 as compared with 1911. Permits were issued in December to a value of \$79,690.

In St. Louis permits were issued to the number of about 8600, representing approximately \$20,000,000. As compared with 1911, these figures show an increase of about 500 in the number of permits and about \$1,500,000 in the cost of construction.

In Houston the cost of construction for which permits were issued was estimated at \$4,538,230, an increase of \$1,287,618 as compared with 1911. A distinctive feature of Houston's operations was the large number of dwellings erected, these numbering 1013. The cost of temporary improvements for 1912 was estimated at \$438,544. In December a total of 68 permits was issued, representing a cost of construction of \$177,100.

Operations in El Paso reached an estimated value of \$2,227,905. As compared with figures for 1911, there was an increase of nearly \$1,000,000. A total of 889 permits was issued in 1912 as against 617 in 1911. In December a total of 62 permits was issued, representing a cost of construction of \$111,745.

The cost of construction for which permits were issued in Dallas was estimated at \$4,869,448.

In Galveston approximately 600 permits were issued during the year, of which

about 500 were for residences or improvements to residences. The total cost of construction is estimated at more than \$1,500,000. Among the more important structures undertaken are the American National Insurance Co.'s office building, Model Laundry's building, Seamen's Bethel and the Panama Hotel.

The cost of construction for which permits were issued in San Antonio was estimated at \$2,798,492, the number of permits being more than 3200. As compared with 1911, these figures show an increase of \$603,552 in the cost of construction and about 200 in the number of permits issued.

Building operations in Fort Worth were estimated at \$3,389,351, the most important single building being that of the State National Bank to cost \$300,000. Permits were issued for December construction to the amount of \$965,854.

The cost of construction in Beaumont was estimated at \$371,914, an increase of about \$21,000 as compared with 1911. Permits were issued in December for construction to cost \$32,000.

It is estimated that permits were issued in Fort Smith, Ark., representing \$750,000. These include 234 permits for residences estimated to cost \$321,462, and 44 buildings for business and factory purposes estimated to cost \$417,525.

Permits were issued in Kansas City for construction to cost \$12,396,328. For December the value of operations was estimated at \$876,060, an increase of \$439,254 as compared with the corresponding month last year.

Statistics compiled by the secretary of the Board of Trade of Hagerstown, Md., indicate that \$2,000,000 was expended for improvements. Among important items of construction were the erection of a passenger station and improvements for the Western Maryland Railway, costing \$500,000; Frederick & Hagerstown Power Co.'s electric plant, \$250,000; Fidelity Cold Storage & Transfer Co.'s plants, \$165,000; People's National Bank Building, \$50,000; Hagerstown Country Clubhouse, \$50,000; Jones Cold Store Door Co.'s plant, \$40,000; improvements to municipal electric-light plant, \$32,000; erection of two churches and other buildings.

New buildings and improvements undertaken in Frederick, Md., represent an investment of approximately \$600,000. Among the important structures are the Frederick County National Bank, costing \$100,000; Boys' High School, \$60,000; Pythian Castle, \$27,000; improvements to the Evangelical Reformed Church, \$25,000; improvements to the Methodist Episcopal Church, \$40,000, and other structures of minor importance.

Building operations at Baltimore, including alterations and additions, cost \$10,385,892. New buildings included 2221 brick residences, to cost \$3,690,669; 124 frame dwellings, \$535,850; 10 apartment-houses, \$615,000; 8 churches, \$126,000; 104 manufacturing buildings and warehouses, \$1,706,548; 4 office buildings, \$555,000; 2 stores, \$186,775; 2 hospitals, \$114,000; 5 schools, \$426,688, and minor structures.

More than \$2,500,000 of municipal improvements will be made in Houston this year, including \$1,250,000 for storm and sanitary sewers, \$1,000,000 for schools, \$750,000 for bridges, \$700,000 for paving and \$450,000 for parks.

In the first week of this year 275 carloads of tomatoes were ready for shipment from the vicinity of Miami, Fla.

The output of lead and zinc last year in the Joplin (Mo.) district had a value of \$17,500,000.

What Water-Power Development Means to the South.

By F. Y. Low.*

That the establishment of manufacturing industries in any community or section is of the greatest importance, taken with the commercial development always incident to large pay rolls and its drawing power of money from outside districts, is generally recognized, and many communities offer large bonuses to secure the location of such industries in their midst. Particularly is a community prosperous, and at the same time more free from periods of depression, when a diverse line of industries is attracted.

The economic reasons which in the past made certain sections of the country concentrated manufacturing units are changing. Today we find long hauls of raw material to distant points for fabrication and a long haul back to the consumer less the rule. Particularly is this true of the South. All industrial enterprises are gradually being handled on more scientific lines. Waste is being eliminated, the principal item of which is transportation to or within the fabricating plant.

Today we see a marked movement to locate industries at the source of raw materials, to locate mills and finishing plants at the mine, and to make complete in one large plant what was formerly made in several and assembled in still another. Again, every item of cost is being scrutinized, and where in times past the cost of power, which is a material item in every industry, was not generally known and little considered in locating an enterprise, today it is considered of vital importance, and locations affording cheap power have prospered and grown through the industries secured thereby. The South has not shared properly in the wealth created in the fabrication of its raw materials, but the present movement above outlined is turning strongly to the location of industries at the source of the raw materials.

With the future intensive development of industry on true economic principles, industrial leadership of one section over another will devolve to considerable extent on the question of a source of cheap power which does not impoverish that section.

The South has seen a wonderful awakening and development in the past decade. The statistics of commercial activities show nearly 100 per cent. increase in that time, although the population increased only about 17 per cent. The coming decade promises a great increase for its wonderful agricultural, mineral, timber and transportation, and water-power resources have attracted wide attention. These coupled with the natural advantages of climate and topography, with an awakened commercial sentiment in the people of the South, and with changing industrial economics, make the industrial and commercial future of the South most promising.

Water-power development will be a highly instrumental factor in realizing this prosperity. In this the Southeastern States at least are especially favored by physiographic features; the copious rainfall, semi-humid climate, forested watersheds, storage possibilities, freedom from ice troubles and frequent occurrences of suitable dam sites, all physically favorable.

It is not intended to go into statistics as to the developed and enormous undeveloped water-powers available in the

South, but to outline certain conditions which affect the realization of the great benefits accruing from development of this resource. Today to develop a water-power means to develop a hydro-electric power. The application of water-power through the medium of electricity has become universal. In time it will become nearly so with steam power itself.

The development of electric transmission makes it at once possible to locate industrial plants where labor, topographic and transportation facilities are most favorable, and at the same time enjoy the benefits of cheap power generated at otherwise unfavorable locations. Thus the power of an inaccessible stream bed is as available as if the power were used direct at the water wheel. Then, too, the congestion formerly inevitable at stream banks where power was available has become unnecessary.

The use of a water power to serve one industry, as before the development of electric transmission, is uneconomic. Electric power is universal in its application, and wonderful in its flexibility, and electrical motors wonders of reliability and efficiency. Today we find energy distributed over a wide territory to mines, various industries, public service utilities, farms, electro-chemical and fertilizer manufactories, all operated from one central vitalizing power system, and the uses of electricity are expanding continually. Successful systems are in operation selling water power to coal mines for the mining of coal itself. The day is not far distant when cooking by electricity will be the rule; when soil products will be stimulated to wonderful results directly and indirectly; when every individual will find electrical energy an intimate part of his daily routine and comfort. New applications are constantly being developed. In short, hydro-electric power, like a railroad, develops its own market, and in the developing industries spring up based on local resources, in turn reflected in the general commercial life and increase in population incident thereto. Many of the local resources would not be developed but for such power. Many are stimulated to manifold productiveness through its agency.

Not only are these direct benefits certain, but there are associated benefits which may be realized simultaneously. There are vast swamp areas in the South, some of which can be rendered valuable as power reservoirs, and at the same time render available the contained timber wealth thus made accessible by the incident water transportation created. Navigation on streams can be facilitated; the loss from floods and erosion abated; flood waters conserved and turned into wealth. The interests of the South are one with those of the North in development of power on head waters of rivers. The enormous loss from Mississippi River floods can be abated only by reservoirs created by power dams on the head waters. All these and the startling present depletion of fuel resources now so wastefully used, which future generations may learn to use with manifold the efficiency known today.

The development of electric transmission of power over large areas has thus opened up a wide field and introduced new factors. Accordingly we find power transmission systems logically developed, serving loads beyond the capacity of any single available power, by a chain devel-

opment of several powers on one stream, each bettered by the storage capacity of the others; or powers on several streams connected to the same system, giving the advantage of diversity of stream characteristics and reliability of supply; or we may have a combination of water and steam power, the steam power supplementing the water powers in low water periods, and permitting a greater sale of water energy and giving increased insurance of uninterrupted service. Such joint use of steam plants and water powers in one system is today the truly economical development of water-power resources realizing the maximum use of the waters of the streams at the minimum cost, and affording exceptionally cheap secondary power for the development of natural resources, which otherwise could not be added to useful wealth. All of this economic development involves investment in distributing systems generally greater than the costs of plants themselves, and often leads to ownership of the power supply in a given territory by one interest. In fact, only through such unified control can the most efficient utilization of this resource be attained, and development on other lines must be disastrous, or impose a burden of cost which will ultimately be at the expense of the community served.

Monopoly in power systems in a territory is inherent and of the greatest benefit to all. Competition means duplication of investment, increased operating cost and discouragement and loss to investors. All of the evils of duplication must ultimately reflect against the interest of the public in higher rates, or worse still, considering the constructive characteristics of water power development, a lessened activity in such undertakings.

In the face of steady improvements in fuel engines and the growing size and centralization of manufacturing plants, all conducive to the manufacture of power at a low cost, it is manifest that there is little margin for duplication of water power investment. In fact, only by intensive development of the power market of a given territory, without destructive competition, by a unified control, are such enterprises uniformly commercial successes.

The development of a power system involving water-powers, steam plants and a network of distributing lines, and their successful operation, is a highly specialized undertaking requiring the utmost financial, engineering and commercial skill and ample resources. Given these, water-power developments have proven stable and attractive investments. History records many failures due to lack of some one of these elements. On the other hand, the profits to the successful companies have been moderate, popular impression to the contrary. Future development will therefore be stimulated or retarded materially by the influence of popular attitude and the character of local, State and Federal legislation affecting such enterprises.

The country is now undergoing an epidemic of harrassing and discouraging sentiment and legislation against railroads and all public service corporations which are constructive forces in the country's prosperity, and this must inevitably discourage enterprises so necessary to general prosperity. These enterprises are wonderful creators of wealth and values which are shared by all, and to handicap full development is to obstruct the prosperity of individual, section, State and country.

The South has fortunately been conspicuously sane in this respect, and with a continuance of such an attitude will attract capital which would otherwise be

distributed in its undertakings over other sections. Much can be done by the people of the South in this direction.

Power companies being natural monopolies economically, and public servants enjoying rights granted by the public served, should be subject to rational rate regulation, in return for which they should enjoy protection from destructive competition, broad powers of eminent domain, and constructive legislation rendering the water-power resources of the streams available for practical development at the earliest possible date. The people of the South should realize the great conserving and constructive forces of water-power development, and allow no condition adverse to water-power development to remain.

In general, the State laws of the Southern States are fairly favorable to power development, but the attitude of the Federal Government is as elsewhere, adverse. Fortunately, the South contains no wide areas of public domain, which, in their usual mountainous location, contain quantities of cheaply developed power, so that the Government policy, or rather lack of policy, in this respect does not hinder development as it does in the West. However, the Government is seeking to establish in the South an extensive forest reserve, which will include much valuable water-power resource, and the interest of the South may become one with that of the Western States in modifying Federal policy in favor of power resources. At the present time, so far as the power resources of the South are concerned, the most needed modification of the Federal attitude occurs in connection with its navigable streams. Under present laws Government regulations are most serious obstacles to water-power development on navigable streams. The possible future use of streams for navigation, where today navigation is a non-existent or negligible quantity, is allowed to outweigh and prohibit an insistent present need of development for power purposes.

Electric transmission of power has created entirely new conditions. Our commercial development in this field has progressed with wonderful strides. Our Federal laws affecting water-power resources have not. The myth of navigation is held paramount on streams to power development, whereas in most cases present commercial considerations should give power development precedence. In fact, with the exception of our greatest rivers, water navigation is of relative unimportance. As a matter of fact, the two are not antagonistic, but corollary, and it requires only a modification of law to obtain substantial development of both to the greatest benefit of our commerce and industries. In the rational improvement of our rivers for navigation power will be developed, and in a proper disposition on the part of the Federal Government toward water-power development primarily, navigation will be greatly facilitated, and in nearly every case power development is a primary requisite. The time is ripe for intelligent legislation, which will make available to constructive capital the power resources of our navigable streams. It is hoped that the change in political administration will bring some relief.

In contrast with obstructive and harrassing conditions which can be and have been imposed on constructive capital seeking water-power investment, compare the enormous benefits which have accrued to communities enjoying the upbuilding effect of large power systems. The truest conservation of resources lies in the earliest utilization of water-power. This can be done successfully under our present organization of society only by private enterprise in large corporate form. A power

*Manager new properties department H. M. Byllesby & Co., Chicago.

system increases its field of usefulness so rapidly, that generally speaking each year demands additional capital greater than the yearly earnings, and to discourage or prohibit capital from undertakings of this sort is to retard progress all through our industries.

The South is vitally interested in this question. Its power possibilities are disproportionately great and natural conditions unusually favorable. Any complete realization of these possibilities must be along the lines outlined, and through intelligent and fair treatment of private capital by the public served. The development of the other numerous and great latent sources of wealth in the South will await, in large measure, such development, and as an accelerating force water-power development in this rich region should have every encouragement.

HOW COTTON GROWERS LOSE.

Damage and Diminution for the Staple from Farm to Factory.

Editor *Manufacturers Record*:

As you are keenly interested in the developing of the South and the saving of its resources, please allow me space in your valuable paper to call attention to the needs of reform in our methods of ginning and marketing our cotton crops. To make my views clear, I will state one of many cases, for all of them are alike.

Farmer A brings a bale of seed cotton to the local ginnery, grading middling. At the ginnery he is preceded by farmer B, whose cotton grades low middling. Now, all of our gins are so arranged as to leave enough of B's cotton on the rolls of the three gins that cut his cotton to form a bat about three inches thick on one side of A's bale. When farmer A takes his bale of cotton to the local buyer he samples both sides, taking out liberal samples. One side is middling, the other is low middling. To protect himself the buyer buys the bale at low middling price, when it only has about three inches of low middling on one side of the bale. This causes about \$3.75 loss to farmer A.

We will follow the bale until it reaches its destination in some foreign mill. After having two liberal samples taken out and sold at a loss to A of \$3.75, the export buyer takes out two more liberal samples, finding it middling on one side and low middling on the other. He also buys it as low middling cotton. On its arrival at the compress sheds it is sampled again and graded by the worst side. After all of the samples have been taken out it is weighed. Then it is taken to the compress, where the ties and bagging are refit and adjusted to the diminished size. Then it is loaded on the steamer, and by the time it reaches the foreign mill it has been robbed of the major part of its covering and it looks as if it had been rolled in mud and water. In its final analysis the foreign spinner bases his price on the clean cotton that reaches his mill. So the loss of the samples, the effect of the bad handling and the degrading and the bad appearance at the foreign mill all fall back on farmer A.

Now, what is the remedy for all of this loss on farmer A? My plan is the application of business methods to the proposition.

First compel, by law if necessary, every ginnery to conform to some regular plan. My plan is that ginneries should be equipped with a cotton press of sufficient power to put all bales to the density required to export them. Also each ginnery should have a grader and weigher, and when a farmer brings his cotton to the gin the grader is on the spot and sees the

cotton that goes into the bale. He grades and weighs the bale, marking it with the grade and weight. The local buyer does not sample it, but buys it according to the grade and weight that the grader marked it. This plan would save farmer A \$3.75 on his bale, not counting the saving of the samples. Under this plan farmer A has his bale well wrapped up and compressed, so he gets one-eighth of a cent more for it on account of better freight rates. No samples are taken out en route to the foreign mills. It arrives there in the original package, the bale not having been sampled, no loss weight is to be allowed for, no waste cotton; hence a better price allowed on that account; and in the final analysis farmer A gets the direct benefit of the condition that it is in when it reaches the foreign mills.

If the 13,000,000 bales of cotton made this year could have been handled as I have stated above, the saving would have been a king's ransom, or more than anyone could figure out.

Can we make the reforms required that will bring about the desired results? It is a big job, but the Southern people are capable of surmounting the greatest difficulties when once aroused or fully alarmed.

Help us. We need to exchange ideas with each other. F. C. THOMAS.
Manning, S. C.

THE SOUTH AND THE TARIFF.

A Plea for Conservatism in Modifying Schedules.

Editor *Manufacturers Record*:

In your issue 12-12-12, when you wrote, "the South needs to watch the tariff question," you sounded a keynote worthy of the loudest pedal; worthy of the attention of not only Southern, but Western interests as well.

When Grover Cleveland first presented his name for President of the United States the vast ore bodies of the Lake district had but lately come into notice. The slopes of many of the Northern mountains and the flat lands of Michigan, and other sections as well, were under a heavy growth of timber. The pits of feldspar throughout the Northern and Eastern States were just beginning to be opened, as were many other deposits of mineral and other natural raw materials, and the South and West were young in the manufacture of commodities. Then the North wanted protection and the South and West free trade.

The North not only received then what it wanted, what it needed to build up its infant industries, and when they had grown from infancy to mammoths in earning capacity, from small manufactories to concerns of immense wealth, and onward into combinations of capital with power to regulate import duties they systematically worked through Congress measures which took import duties off of such raw materials as were becoming scarcer near the points where products were finished.

Look for a moment toward the iron fields of the North, the forests and the other sources of raw material, and you will see that in many instances that those fields are almost barren, and that for a supply of crude materials those factories must look to other fields.

Look at the South today, and you will see immense areas which 25 years since were covered with heavy growths of hardwoods, now stripped of their greatest values. That timber was sawed into lumber and shipped North and East and made into furniture and shipped South again.

Within recent years the South has made wonderful strides toward the establishment of manufacturing industries.

The attention of capitalists all over the world has been attracted to her varied resources, and particularly has money gone into the harnessing of the vast water-powers whose sources are the summits of the various mountain ranges, and particularly the Blue Ridge. To me there is no assurance so convincing as to the future of the South as a manufacturing center as that the millions invested in creating power must find wheels to turn. It cannot be otherwise.

With the announcement that two immense plants for the manufacture of aluminum are locating in the South, we see clearly that capitalists regard the section as a desirable one. And when we realize further that aside from an undeveloped body of bauxite found in New Mexico, there is, so far as I am informed, no bauxite in the United States save those deposits of Arkansas, Georgia, Alabama and Tennessee, and that all the ore mined now is shipped North for treatment, it is plain why the South "needs to watch the tariff question."

When it is known that when monazite was discovered in North and South Carolina, and that men began to realize handsome returns for the product of the mines there, that the duty was taken off of the sand and foreign monazite shipped in free, the closing of the mines followed. When the Appalachian Mountains began producing mica in large amounts is it surprising that the duty on mica was lowered and that the mining of that material almost ceased?

Is it surprising that when the vast stores of iron of the Northern ranges were as though inexhaustible that iron ore was protected, and is it surprising that when the reserves, in the opinion of Mr. Carnegie and other authorities, were indicating their end, that the tariff was removed so as to allow foreign ores to come in at practically no import duty at all?

No, it is not surprising, as while a few cents or dollars a ton placed upon raw material which when crude in most instances bring the producer but a slight profit, but when finished sells for thousands of dollars per ton, it is not strange that the manufacturer in his greed even takes from the producer the scant earnings which might result from his labors or in even shutting down his mines.

Thirty cents a ton on iron ore seems small, yet John B. Newton of the Virginia Iron, Coal & Coke Co. is quoted as having said that had the tariff remained on ores of iron, that many furnaces which have been shut down in the South would have been able to continue in operation.

It is not my purpose to attack manufacturers of the North and East, nor to begrudge them the profits they have earned, but it is time, high time, that the South should come into its own in a fair division of profits from manufactures, and particularly upon those articles which in a crude state this section of the United States alone produces.

It is time that Congress should recognize the fact that a too radical reduction of the import duties on raw material in which the South particularly abounds will not only in many cases work hardships, but close down and bankrupt many industries in the South which with reasonable protection will prosper as is their due.

When it is taken into account that there is scarcely a mineral found in the United States which does not exist in paying quantities in some portion of the South, and when we know that to reap just profits in an industry dependent upon reasonable protection for its life, that such material should be reasonably protected.

HARRY V. MAXWELL.

Bristol, Tenn.

Carolina Public Service Co.

Referring to its recent purchases and plans for improvements, the Carolina Public Service Co. of Columbia, S. C., writes to the *MANUFACTURERS RECORD* as follows:

"Greenville Ice & Fuel Co., Greenville, S. C., improvements will be limited to increase in ice storage. Hygeia Ice & Fuel Co., Spartanburg, S. C., improvements will be limited to auxiliaries and details which it will not be necessary to publish. Union, S. C.—At this point we will move in the plant of the Union-Buffalo Mills at Buffalo, S. C., to Union proper, and will erect same in new building; improvements to consist of boiler plant, etc. Columbia Ice & Fuel Co., Columbia, S. C.—At this point we are doubling the capacity of our plant, the orders for the necessary equipment having been placed. Electric Light, Ice & Fuel Co., Johnston, S. C., improvements will consist of increasing ice storage, additional boilers, etc.; no additional light equipment will be required. In Charleston, S. C., we have purchased the Charleston Mutual & Carroll Plant; improvements at this point have not as yet been decided on."

Maryland Steel Co. Improvements.

The Maryland Steel Co. of Sparrows Point writes to the *MANUFACTURERS RECORD* as follows:

"The reconstruction of 'B' furnace involves the rebuilding of the shell proper, the installation of a skip hoist with suitable hoisting engine, and a system of reinforced concrete storage bins for the economic handling of the raw materials and the mechanical charging of the same. The improvements also include the building of new dry dust cleaning apparatus for the waste gases and some minor changes in and about the casthouse. We estimate that about \$325,000 will be expended in these improvements."

For Co-operative Selling.

The Southwestern fruit and truck growers have formed a co-operative selling exchange, with headquarters at Texarkana, Tex., and will undertake to handle between 3000 and 4000 cars of fruit and truck during the present year. The organization itself controls fully 3000 cars. The officers of the exchange are W. A. Nabors, president, Winnsboro, Tex.; Bert Johnson, first vice-president, Highland, Ark.; S. J. Verhalen, second vice-president, Scottsville, Tex.; Gerald Fitzgerald, third vice-president, Morrill, Tex.; J. W. Ogburn, treasurer, Ogburn, Tex.; C. W. Holman, temporary secretary, Dallas.

Mr. B. I. Susong of Newport, Tenn., writes to the *MANUFACTURERS RECORD* that J. A. Susong and Walter McCabe of that place have secured control of an onyx mine there, and that a company is being planned to market the output.

The American Iron and Steel Institute will hold its next general meeting at New York May 23 and 24, and a special committee, with Mr. James A. Farrell, chairman, has been appointed to have general charge of arrangements.

J. C. Melcher of O'Quinn, Tex., informs the *MANUFACTURERS RECORD* that a large surface deposit of kaolin has been discovered near West Point, Tex., on the San Antonio and Aransas Pass Railroad.

During the past year building improvements at Miami, Fla., represented an investment of more than \$2,000,000.

There are 735 coal mines in the United States, each producing more than 200,000 short tons of coal annually.

THE PEANUT CROP.**Improved Methods of Handling the Annual Production.**

[Special Cor. Manufacturers Record.]

Oceana, Va., January 3.

In peanut regions of the South is now used a thresher, which, in one day, does the work of fifty to sixty hands. It leaves the nuts in just as good shape as those picked off by hand, and enables the peanut planter to control the harvesting of his crop, as a large crop can soon be har-

natives of Sunny Italy for general distribution, and another large portion passes through a half hundred other manipulations until it appears as peanut oil, butter, or in twenty-five or more different forms of peanut candy or concoctions, alike palatable, attractive and desirable. Great is the peanut. It is doubtful if a Presidential campaign could be successfully pulled off without the accompaniment of the cheerful pop of the peanut.

A. JEFFERS.



A CROP OF PEANUTS IN SHOCKS.

vested with few hands and at less than one-fourth the cost of picking the nuts off by hand.

One by one the shackles are being knocked off from the agricultural pursuits in the South. A few years ago hand labor was plentiful, easily secured, and did fairly good service at reasonable wages. But of late the quality and quantity of labor have both decreased to a very noticeable extent. The berry growers are up against the labor question, although good management and foresight has, as yet, carried the growers through in fairly good shape. But the peanut growers have been troubled somewhat to get their crop picked off, by hand, at the proper time, and the peanut machine, which picks and cleans 250 bushels a day, in good shape, in fully as good shape as handpicked nuts, is a great blessing to the growers, and the effect of such a machine will be to increase the acreage devoted to growing the nuts.

The peanut is one of the many crops in which the South has a decided monopoly. Now that it can be planted, cultivated, dug and threshed out by machinery, making a machine crop of it, instead of a hand crop, we may expect to see the crop increase in acreage, value and importance year by year.

The Virginia crop in round numbers is supposed to be worth nearly \$3,000,000. It is generally grown on land most too light for most of the staple farm crops, unless such land is well manured or fertilized. Experiments made at the Virginia Truck Experimental Station however, go to show that it pays to rotate the peanut crop with other staple farm crops, and to give the soil more humus than it gets in cultivating or growing the peanut crop. Both yield and quality are improved by proper manipulation of the soil in growing other crops alternating with peanuts. Now that the crop is planted by machinery, cultivated by machinery, dug by machinery, and picked off the vines by machinery, it is then but fairly started on its industrial journey, as it must be taken in hand by the peanut cleaning establishments, and cleaned, assorted, polished and brushed; that portion that goes to the general trade, to the

FOR FRISCO DEVELOPMENT.**Plans of the Railroad System in Connection With Its New Department.**

Bearing upon the announcement of the Frisco System of the appointment, with principal office at St. Louis, of Frank Anderson as director of development of the system, S. A. Hughes, its general immigration agent, in an interview with the MANUFACTURERS RECORD at New Orleans, says that the new department will include industrial, immigration, agricultural, horticultural, dairy and poultry activities with a purpose of looking after the development of Frisco properties in general. Mr. Hughes made a trip recently over the Louisiana Southern Railroad, and referring to that he said:

"Our trip to Shell Beach yesterday was not only a pleasant one, but most instructive as well. It was rather a revelation to me to note the great area of unoccupied fertile territory lying idle, and much of it ready for the plow. What Louisiana needs is men, money and brains—men who will do things in the way of farming from an intensive and scientific standpoint. True, you need money for use in reclaiming Louisiana lands, and I believe it can be brought out of its hiding by placing the country prominently before the world—men and money behind the issuance of a drainage bond issue with a million dollars as a starter would furnish the sinews for agricultural development, and once started, there would, in my opinion, be nothing on earth to stop the growth and development of the State. The Frisco is vitally interested in Louisiana. We believe in her institutions and in her future. We realize also that without the agricultural and industrial development we cannot expect returns, and we are fully dependent on the tonnage and passenger traffic. We expect to devote much time in the future toward the development of our Louisiana properties, and with the close co-operation of the press, the land men and others interested in the upbuilding of the State, I am sure that a campaign of inducing the homeseeker to locate in Louisiana will be productive of great good to all. In my

judgment the opening of the Panama Canal will be more beneficial to the City of New Orleans and to the people of Louisiana in general than they fully realize. The opening of the big ditch will not only bring us closer to the Latin-American republics, socially and commercially, but it will revolutionize the commerce of the world, and Louisiana will participate in the enjoyment of this new and growing trade to the fullest extent."

Frank Anderson writes to the MANUFACTURERS RECORD:

"Like most all other railroads, our development work has been divided between three or four departments. However, all the agricultural, industrial and immigration work will be handled by the new department of development. The creation of the department does not mean merely a consolidation of the three, but is the beginning of an agricultural campaign very broad in its scope and along what we think will be practical lines. Several months have been devoted to a close examination of plans and policies being followed out by railroad companies, municipalities and national governments, both in this country and abroad; from all of these we have selected what appears to us to be the best they had. Heretofore agricultural development work has meant little more than spasmodic lectures, which of themselves mean very little to the farmer without actual demonstration."

Conservation Exposition at Knoxville

Plans for the National Conservation Exposition, to be held in Knoxville, Tenn., in September and October, 1913, are going rapidly forward. Four new buildings are to be erected by the Exposition Company. A building to be known as the East Tennessee Agricultural Building is also to be erected. The funds necessary for the erection of this particular building are being raised by the various counties in East Tennessee through their respective county courts. The Knox County Court has appropriated \$12,500 for the East Tennessee Building, which insures its erection. The remaining 34 counties in East Tennessee will be called on for from \$100 to \$500 each, according to their abilities, to complete the fund necessary for the erection of the building.

A distinct feature of the exposition will be the Land Building, in which will be housed exhibits of railroads, State experiment stations and the United States Department of Agriculture. In this building will be a relief map 30x80 feet, which will show the general farm areas, forests, principal cities and streams throughout the entire 16 Southern States. The streams will be represented by actual running water.

The industrial feature of the exposition is being given probably more attention than any other. An all-South building, to be known as the Southern States Building, is being erected, and will house exhibits of Southern manufacturers only. This building will show in graphic and concrete form what it means when the South goes on display with her manufactured products. This is an entirely new feature about expositions, and that it will be an advantageous one to the exposition and the people of the South is assured.

The agricultural and industrial development of the South being portrayed through concrete exhibits at this exposition will have far-reaching results and will be of an educational nature, calculated to bring the resources of the South prominently before the nation.

Conservation is the keynote of the exposition, and by conservation it is meant not only the preservation of our soils,

waters and forests, but the conservation of time, labor and material as well. Anything that tends to save waste, time or money, or that will promote health and human efficiency, that is conservation, the same as is the preservation of our natural resources. The first step in civilization is to develop the natural resources of a community; the second step is to so conserve those resources that they might be made a perpetual source of wealth and affluence to posterity. Just how these things can be best brought about will be shown at the exposition in Knoxville next fall.

IMPROVEMENTS AT AUGUSTA.**Nearly \$5,000,000 Represented in Undertakings in Progress or Planned.**

[Special Cor. Manufacturers Record.]

Augusta, Ga., January 2.

Undoubtedly one of the greatest projects in this vicinity which has passed the formative stage is represented in the levee construction work, for which over \$1,500,000 will be expended. The city and Federal Government have already put over \$250,000 in river bank improvement, preparing for the building of the levee. The survey has been completed and detailed plans made. The three first contracts covering a mile of the levee and the canal and Hawk's gully gates has been awarded, providing for approximately \$200,000 expenditure. The next two contracts will be the construction of the gates at the Sibley mills and the King mills, both of which will be large jobs. Following this the construction work on a mile of concrete levee through the most valuable business district of the city will be awarded. Along this stretch extensive riprap work, consisting of facing the river bank with heavy stone and concrete, has been completed. The levee will be a general average height of 35 feet, and will protect the city against a technical 52-foot river, though this is 10 feet in excess of the highest known records. The top of the levee will be 10 feet wide. This insures Augusta against any possible damage by high water.

Corresponding in importance to this undertaking is the development of the Savannah River power, just below Stevens Creek and eight miles above the city. The Georgia-Carolina Power Co. is behind this enterprise, and J. G. White & Co. have been engaged on the construction work since the first of July, and hope to complete the task May 1, 1914. The dam will be 2700 feet in length and an average of 35 feet high, from which a total of 31,000 horse-power can be ultimately developed, though only half that amount will be developed at first. The electricity will be transmitted to Augusta on 66,000 volts, six wires being used on the tower lines. At the Augusta plant the voltage will be stepped down to 2200 volts and distributed as desired. The construction of the plant involves the expenditure of almost \$2,000,000.

Aside from these undertakings, an era of construction is on in Augusta in which \$1,000,000 will be expended in erecting large buildings. The first of these will be the Augusta Chronicle building, which will be 10 stories high and constructed of reinforced concrete and steel. Work on this building will commence the first of February. Following this the new hotel will be erected just in front of the Union Station, where the new \$250,000 Federal building will also be put up. The new hotel will be 10 stories high, and constructed on fireproof plans, reinforced concrete and steel and tiling being used. The project is financed by prominent Au-

gusta business men. Each of the two buildings mentioned will cost \$200,000.

The erection of the city hospitals involves the expenditure of \$300,000, and they are already under way, the contracts being awarded some time ago. St. Joseph's Academy, which was burned at Washington, Ga., the early part of December, will be erected on Monte Sano this spring and ready for the opening of the next school term. The plans being prepared call for \$100,000 expenditure. The new Kress building on Broad street will cost approximately \$75,000. Other structural work of importance planned includes an office building for the Empire Life Insurance Co. J. C. McCLUSKEY.

SOUTH GEORGIA GROWTH.

Reflected in Activities of Divers Kinds at Tifton.

[Special Cor. Manufacturers Record.]

Tifton, Ga., January 2.

One-third of a million dollars in new enterprises, nearly all of which is already in active operation, or soon will be, is the record for Tifton during the past year in furtherance of the campaign inaugurated early in the present year for a 10,000 population in 1920.

Greatest in capitalization among these enterprises is a \$100,000 fertilizer acidulating plant with a yearly capacity of 1000 carloads. Fifteen acres of land in the eastern section of the city have been purchased for the plant of the International Chemical Co. on which the buildings are now being erected. It is expected to have this plant in operation within the next two months. In the laying of the foundations of the buildings they are being so placed that in case it is found expedient the capacity of the plant can be doubled. The Tifton branch of this company will manufacture fertilizer materials and also mix the fertilizers.

The organization of the Americus, Tifton & Atlantic Railroad Co., which has as its purpose the building of a line of railway from Americus to Milltown, and possibly later extending to Jacksonville, was conceived and executed in Tifton. The charter for the company was granted several months ago, and the survey from Tifton to Milltown, the southern division, has already been completed. The distance between these points is 38½ miles, the road running from Tifton to Nashville and from there to Milltown. The northern division has been surveyed from Americus to Oakfield, and the remainder of the distance will be completed within a few days. The road will connect the county-seats of four of South Georgia's most prosperous counties, extending from Americus through Oakfield, Doles, Shingler, Ashburn, Tifton, Nashville and to Milltown. The road when completed from Americus to Milltown will be 106 miles long, and will traverse one of the best farming, fruit and truck growing sections in the State. A section that has not more than 20 per cent. of its available farm land in cultivation and abounds in opportunities for the homeseekers. The offices of the company have been located at Tifton. The officers are I. W. Myers, president, Tifton; J. B. Shingler, first vice-president, Ashburn; L. G. Council, second vice-president, Americus, and John W. Greer, secretary, Tifton. Mr. H. H. Tift of Tifton is chairman of the board of directors, the board being composed of men of sufficient means to build the road without outside help.

The organization of a \$75,000 oil mill and building of a \$32,000 cotton compress and a \$6000 gin are so closely linked that they can be discussed together. Tifton was for years a lumber market, and neglected to look to the farming interests.

The playing out of sawmills has forced the selling of farm lands and a hustling for farmer trade. As there is not a cotton compress or oil mill in this immediate section, the companies were organized and the compress rushed to completion. The oil mill could not be placed in time for the 1912 business, but will be in operation for the 1913 crop. The least of the three tasks was the gin, and it was first completed. During the season just passed it has more than justified its building in the new business brought into the city. These enterprises were all needed and necessary for the rapid opening up of the farm lands in this section which is expected within the next few years.

A bond issue for a \$60,000 courthouse was carried in the early spring, and the building is now in course of construction. The cornerstone for the county's new home was laid December 10, the building being about one-fourth completed. It will be one of the most attractive and conveniently arranged county buildings in the State when the finishing touches have been made.

The staging of the second exhibition of the South Georgia Land and Agricultural Exposition, a ten-day show of the resources of the southern section of the State, which contained 750 exhibits by corn club boys, over 500 fine birds in the poultry department, besides a large and comprehensive display of agricultural products, is another accomplishment for Tifton. The benefit of the exposition is already being realized in the sale of farm lands.

A donation of \$2000 for the securing of a demonstration agent for this section, with headquarters at Tifton, is another feather in the city's cap. The value of this work to the farmers, and through them to the merchants, is one that cannot be estimated.

A few lesser things done were the organization of a good roads association, having as its purpose the building of good roads throughout the county, and to see that they are kept in good repair. The holding of the second district high school meet, and the Tift and Irwin teachers' institute. A series of interesting and valuable farmers' institutes were also held.

Probably the most significant of all these is the building of a 36-foot boulevard eight miles in length, which will entirely surround the city. The plan was evolved by Mr. H. H. Tift and is being built at his own expense. The total cost will be inside of \$10,000. Incidentally with the building of the boulevard, Mr. Tift placed on the market all of his cut-over timber lands in this section, which will aggregate over 20,000 acres. The land immediately adjoining the boulevard will be sold in five-acre tracts, the land adjoining the five-acre tracts will be sold in ten-acre tracts, while the other lands will be sold in farms ranging from ten acres to a lot. The selling off the Tift lands in Tift county and the territory immediately adjoining will be the greatest boost to the ten-thousand campaign that Tifton has yet been given.

The success of the campaign is being eagerly watched, and with the ginger and enthusiasm that has been exhibited during the first year, carried through the remaining eight, the ten-thousand population in 1920, after all, is but a small dream.

J. L. HERRING.

Some factors of scientific management not closely related to labor problems will be discussed by F. A. Waldron before the American Society of Mechanical Engineers in New York January 14.

Literary Notes.

The Industrial Development of Nations and a History of the Tariff Policies of the United States and of Great Britain, Germany, France, Russia and Other European Countries. By George B. Curtiss. Published by the author, 508 Security Mutual Building, Binghamton, N. Y. Three volumes. Price \$15.

Sixteen years ago Mr. Curtiss published a volume of 900 pages, "Protection and Prosperity," the result of a comprehensive and careful study of tariff legislation in this country and abroad from the viewpoint of the protectionist. This study has been extended and enlarged, and the results have been embodied in these three volumes, aggregating nearly 2000 pages, and almost encyclopedic in their scope. After sketching the commercial history of the world down to 1650, Vol. I deals with early England under free trade, the protective policy of Great Britain between 1558 and 1800, the effect upon home industries of England's return to free trade, protection to native industries in the German Empire, Russian, France, Austria-Hungary, Italy, Belgium, Holland, Switzerland and other European countries, and commercial and industrial developments in England, Germany and France between 1800 and 1912.

Vol. II is devoted to the commercial tariff policies of Great Britain as they affected the American colonies between 1607 and 1776, and the tariff question in the United States up to 1860. In it are discussed the British navigation laws and the British legislation restraining manufactures, the material influences leading to the Revolutionary War and the experience of the States under the articles of confederation and before the adoption of the Federal Constitution. This is followed by a study of the periods from 1789 to 1834 and between 1834 and 1860, in which, with illuminations from current publications and the utterances of leading statesmen of the time, the author contrasts what he called the protective period and that of protection versus free trade.

In Vol. III the fiscal policy of the country from 1860 to 1912 is treated at length, successive tariffs since then, together with their bearing upon political and industrial developments, being analyzed in detail and illustrated with statistical and documentary material.

The work which Mr. Curtiss has done in the production of these volumes was enormous, and his compilations of a mass of official information as to exports, imports, prices, manufacturing, agriculture, etc., together with copious citations from authorities in economics and from leaders in American politics, make the work of timely importance.

The Women of the Debatable Land. By Alexander Hunter. For sale by Fleet-McGinley Co., Baltimore, Md. Price \$1.50.

The debatable land is that portion of Northern Virginia, with Fauquier county as its heart, which, swept again and again in turn by Federal and Confederate forces 50 years ago, was the scene of much of the romance and adventure of the war. There was born the Black Horse Cavalry, composed mainly of dashing spirits born in that region who followed Mosby gallantly and gaily. Alexander Hunter was one of that company of rangers, and his book is a record of personal experience to which have been added years of research and labor. The women of the South were the burden-bearers of the war, and some day the full story of their courage and devotion will be told. Nowhere else in the South, perhaps, was their plight more strenuous than in this debatable land of

Virginia, and Mr. Hunter, in filling his book with the atmosphere of their presence, has succeeded in presenting a fascinating story and one which the historian in the general field can ill-afford to neglect.

Building Stones and Clay Products. A handbook for architects. By Heinrich Ries, Ph.D. Publishers, John Wiley & Sons, New York and London. Price \$3.

Feeling that it is important that architects should have at least elementary familiarity with the properties of building stones and methods of manufacture of clay products, the author has endeavored in this work to present fundamental facts in as clear style as possible, and he has succeeded in producing a work appealing to a wide class. In separate chapters are discussed rock minerals and rocks, properties of building stone, characteristics and localities of occurrence of igneous and gneisses, sandstone, limestones, marbles and slate, clay products, including bricks, architectural terra-cotta, hollowware for structural work and fireproofing, roofing tile, wall and floor tile and sewer pipe. The work is profusely illustrated with half-tone engravings, maps and diagrams, and carries a glossary of nearly a dozen pages.

Mission Furniture; How to Make It.

Prepared for and published by the Popular Mechanics Co., 318 W. Washington street, Chicago. Cloth bound. Three parts. Price 50 cents each part.

This publication is further augmented with the issue of Part 3, which contains 128 pages, including designs that have not been previously published in any form. Part 1 contains 96 pages, with 21 designs, and Part 2 contains 128 pages, with 32 designs, all of which, taken together, form a complete treatise on the subject of mission furniture. Detailed illustrations and designs of the various pieces of furniture are accompanied by dimensioned working drawings. Among the special features are articles describing how to produce the different finishes and showing methods of faking joints and for bending wood. Persons who are handy with the use of tools may make their own furniture by using these books as a working guide.

Modern Organization. By Charles De Lano Hine. Publisher, Engineering Magazine Co., New York.

This is one of the Works Management Library published by the Engineering Magazine Co., and is an exposition of the unit system of organization for promoting efficiency as applied to the operation of great railroad systems. The introductory chapter deals with the unit system on the Harriman lines, and is followed by chapters on broadening the ideals of lines, supervision, overspecialization, fallacies of accounting, supplies and purchases, line and staff and the genesis and revelation of organization.

It is announced that Bennie Owens of Ware, Elmore county, Alabama, raised 237 bushels and three pecks of corn on an acre of land last year.

In the past calendar year Galveston exported to foreign lands merchandise to the value of \$288,107,189, which included 4,294,290 bales of cotton.

The value of vessels built at Baltimore in 1912 was \$4,010,800.

Maryland's pack of tomatoes in 1912 was 6,500,000 cases.

Expansion at Asheville.

Board of Trade,
Asheville, N. C., January 4.

Editor Manufacturers Record:

The year just closed has been one of the greatest development in the history of Asheville. Two million dollars worth of construction work has been completed and under way, with the outlook for 1913 for still greater advancement. The Grove Park Inn, now in course of construction to be ready for opening July 1, 1913, has just made the announcement that an additional wing with 65 more rooms is to be added to the building on the south end, making a 225-room hotel instead of a 160-room hotel as originally planned. Day and night forces are being worked, and the structure is expected to be under roof inside next 45 days. Contract for 1600 pieces of solid quartered white oak has been given to the White Furniture Co. of Mebane, N. C., for furnishing halls and bedrooms, while the contract for dining-room, grill-room and Big-room furniture has been let to the Roycrofters of East Aurora, N. Y. Work of grading the exclusive autoway from foot to summit of Sunset Mountain has just been started, and this road will be made a boulevard 45 feet in width from the hotel to top, three miles, and 50 feet wide from hotel to foot of mountain, half mile, and surfaced with asphalt binder, the estimated cost of which is \$45,000. Total estimated cost of the new hotel and Sunset Boulevard is three-quarters of a million dollars.

The Langren, a modern eight-story fire-proof hotel, constructed of reinforced concrete, has been completed at a cost of \$325,000, and improvements, additions and furnishings have been made to the Swannanoa-Berkeley, the Margo Terrace, the Knickerbocker and the Ravenscroft, and a force of 100 men is rapidly changing the third and fourth floors of the Battery Park at an estimated cost of \$65,000.

The Asheville Cotton Mills, of which Mr. George R. Murphy is superintendent, has expended \$75,000 in addition to building and installing new machinery.

The American Furniture Manufacturing Co., with F. S. Kennett as the prime mover, has completed and put into operation a furniture plant which cost \$30,000.

The Biltmore Box Factory, R. P. Foster, proprietor, has added new machinery.

A new plant for the manufacture of pin blocks has been established by Mr. J. Elwood Cox, and is employing 25 men.

J. E. and J. B. Rumbough are constructing a four-story fireproof building, 72x100 feet, for use as a machine shop and garage, the cost of which will be \$25,000.

J. E. Carland completed a large brick building 50x125 feet for the Arbogast Motor Co., the second floor of which is being utilized as armory for the troop of cavalry organized by R. R. Reynolds.

The O. K. Auto Co. is constructing a two-story addition to its building.

A. H. Carrier and S. A. Lynch are constructing a \$25,000 theater.

Frank Loughran is building a business house of brick on Haywood street, 50x150 feet, to be occupied by Yates & Maguire as a wholesale and retail grocery and coffee-roasting plant.

Fifty thousand dollars are being expended by the owners of four store buildings, adding one story, making modern fronts and extending the depth, while the owners of four other stores have let contract for similar improvements.

Over half-million dollars worth of building permits have been issued for the first half of the fiscal year ending December 31, 1912.

N. BUCKNER, Secretary.

GOOD ROADS**WEEK'S HIGHWAY RECORD.****Progress in Southern Road and Street Improvement.**

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Big Stone Gap, Va.—Wise county voted \$130,000 bonds to place macadam on roads already graded.

El Paso, Tex.—El Paso county voted \$40,000 bonds to construct macadam, gravel or paved roads in District No. 3, and \$350,000 bonds to construct macadam, gravel or paved roads in county.

Falfurrias, Tex.—Brooks county voted \$45,000 bonds for road construction.

Marion, Va.—Marion county voted \$75,000 bonds for road construction.

Marion, Va.—Smyth county voted \$150,000 bonds to construct roads, including its portion of the Bristol-to-Washington highway.

Maryville, Mo.—Nodaway county voted \$50,000 bonds for road construction.

Norton, Va.—Wise county voted \$130,000 bonds to complete construction of roads already begun.

Philadelphia, Miss.—Neshoba county voted \$100,000 bonds for road construction.

Port Lavaca, Tex.—Calhoun county voted \$135,000 bonds for road construction.

Sweetwater, Tex.—Nolan county voted \$100,000 bonds for road construction.

Bonds to Be Voted.

Hearne, Tex.—Robertson county votes January 21 on bond issue for road construction.

Liberty, Miss.—Amite county votes January 11 on \$80,000 bonds for road construction.

Shreveport, La.—City votes February 4 on \$300,000 bonds to resurface number of paved streets, etc.

Waco, Tex.—City votes February 6 on \$100,000 bonds for street improvements.

Contracts Awarded.

McAlester, Okla.—City awarded contract at \$7806.25 for street paving in Second ward.

Mobile, Ala.—Board of Revenue and Road Commissioners awarded contract to improve two additional miles of Moffat road.

Paris, Tex.—City awarded contract for paving; cost about \$30,000; about one mile 36-foot street.

Contracts to Be Awarded.

Bradentown, Fla.—City receives bids until January 23 for constructing 37,000 square yards bituminous flush coat surface, asphaltic concrete or asphalt macadam paving; also construct 48,000 linear feet combined curb and gutter.

Greenville, S. C.—City will pave 11 additional streets; about \$50,000 available.

Live Oak, Fla.—City receives bids until February 5 for about 25,000 square yards street paving.

Warwood, W. Va.—City receives bids until January 10 to grade and macadamize Main street, about 3100 linear feet.

Broom and Knitting Machinery.

Charles A. Leonard, American Southern Baptist Mission, Laichowfa, Shantung, China, writes to the MANUFACTURERS RECORD as follows:

"Will you please have some of your advertisers send me catalogues of machinery for making house brooms; also of machinery for knitting socks and gloves. I am hoping to introduce some American machinery in the industrial department of our boys' boarding school here."

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

RAILROAD DEAL EXPECTED.**Tennessee Central, in Receivership, for Sale, Reorganization and Refinancing.**

On application made upon behalf of the Mercantile Trust Co. of St. Louis, and also for a majority of stockholders and bondholders of the Tennessee Central Railroad, receivers for the company have been appointed by the United States Court at Knoxville, Tenn. Reports from Nashville, where the headquarters of the road are situated, say that the suit is a friendly one, and S. W. Fordyce, Jr., of St. Louis, vice-president and general counsel for the company, is quoted saying that in order to fulfil a plan for reorganizing and refinancing the property the owners found it desirable to have the general mortgage foreclosed and receivers appointed. The receivers are W. K. McAlister and H. B. Chamberlain, both of Nashville, the latter being one of the vice-presidents. A. B. Newell, the president, was originally named by the court, but he declined the position, as he might leave Nashville soon.

From 1905 to 1908 the Tennessee Central was leased to the Illinois Central Railroad and the Southern Railway, the former taking the western division and the latter the eastern division of the line, but the leases terminated and the operation of the line was again taken over by the owners. Recently there have been rumors that the Illinois Central was to enter Nashville over the Tennessee Central, and now it is reported that if the road is sold by order of the court the Illinois Central will purchase it. On the other hand, Mr. Fordyce is quoted saying that there is no probability of either the Illinois Central or the Southern Railway taking over the property, but that new men and new money will be behind it to the amount of \$5,000,000 to \$8,000,000. As to plans for the reorganization, nothing will be announced for a month, but the physical condition of the road will be improved.

It is 250 miles long from Harriman, Tenn., west via Nashville to Hopkinsville, Ky. It was built by the late Col. Jere Baxter of Nashville, and was designed to be an entirely independent line for the benefit of Nashville and the territory traversed. The city took stock to the amount of \$1,000,000, and is represented by two directors. The road has a belt line of 6 miles at Nashville, besides branches to Carthage, 7½ miles, and to Wilder, 21½ miles; to Isoline, 8¾ miles, and to Fall Creek, 2½ miles; total length of line operated, 293¾ miles. There are 32 locomotives and 741 cars.

The securities of the company include \$7,941,450 of stock outstanding out of an authorized issue of \$8,000,000. The first mortgage is represented by \$4,014,000 of prior lien 4 per cent. 30-year gold bonds, due January 1, 1934, of which the Mississippi Valley Trust Co., St. Louis, is trustee. Next is the general mortgage represented by \$8,353,900 of 5 per cent. gold bonds, of which \$8,206,000 are 50-year and \$147,000 45-year, all due January 1, 1954, the trustee being the Mercantile Trust Co. of St. Louis. Of this issue, \$4,200,000 are reserved to retire the prior lien bonds, that being the authorized amount of the first mortgage securities. The total authorized amount of the general mortgage bonds is \$20,000,000. There are also \$12,000 of Nashville & Knoxville 6 per cent. 30-year bonds, due January 1,

1918, and outstanding against part of the road.

The securities of the Nashville Terminal Co., a separate corporation, the belt line referred to, consist of \$1,000,000 capital stock, all owned by the Tennessee Construction Co.; \$1,000,000 of first mortgage 5 per cent. 30-year gold bonds, due January 1, 1932, and an authorized issue of \$3,000,000 of refunding mortgage 5 per cent. 40-year bonds, due May 1, 1949, of which \$1,000,000 are set aside to retire the first mortgage bonds and the rest are held in the company's treasury.

In the balance-sheet of the railroad company the road and equipment are valued at something more than \$49,500,000.

The directors are Eben Richards of New York, chairman of the board; A. B. Newell of Nashville, president; S. W. Fordyce, Jr., of St. Louis, vice-president and general counsel; H. B. Chamberlain of Nashville, vice-president; H. Clay Pierce of New York, Clay A. Pierce and Thomas W. White of St. Louis; E. R. Richardson, John T. Lellyett, L. B. Fite and H. G. Lipscomb of Nashville.

TO OPEN A RICH REGION.**Mineral, Timber and Farming Industries to Develop With a New Railroad Plan.**

George A. Clark of Nashville, president of the Tennessee, Kentucky & Northern Railroad, which, as previously announced, plans extensions north and south from its present 16-mile line, is quoted as saying that the northern extension from Livingston, Tenn., to Rock Creek, Ky., will traverse mineral and timber lands which are in almost a virgin state. The proposed route is via Monroe and Birmingham, Tenn., and near Gunter and Byrdstown. Although now only a local line between Algood, on the Tennessee Central Railroad, and Livingston, he says it is already earning operating expenses and fixed charges, which fact indicates the character of the country. The extension will be about 35 miles long. Another extension south 22 miles from Algood to Sparta, Tenn., via Cookeville is also proposed.

Continuing, President Clark is reported thus: "The road will not compete with any existing line, but, on the contrary, will become a strong feeder for the Queen & Crescent, the Nashville, Chattanooga & St. Louis and the Tennessee Central railroads.

"From the reports of reliable representatives of Eastern bankers, who have had their experts in the field for some time, we learn that the new line will have access at once to over 5,000,000,000 feet of hardwood and other valuable varieties of timber, 400,000,000 tons of high-grade bituminous coal, besides large areas of valuable plateau agricultural and grazing lands. It will also tap the petroleum fields of that region.

"The territory to be entered is more thickly settled than one would suppose, but on account of its remoteness from either river or rail transportation the settlers' earning capacity is very much restricted. As soon as a railroad enters that district the inhabitants will become producers and business of all kinds will be greatly stimulated. Nashville should greatly benefit by this enterprise.

"We expect to start the grading as soon as the winter rains are over, and easily complete the line during the summer of this year.

"I have great faith in Tennessee, but most especially in the upper Cumberland country. I know of isolated sections where the cut-over lands have been cleared that produce crops equal to Middle Tennessee, fruit equal to that of Michigan,

potatoes second to none in yield and quality, and where stock-raising is destined to become a great industry.

"While the mines and the forests will, when opened, enrich the country, it is to agriculture that the inhabitants must finally fall back upon."

KANSAS CITY-ST. LOUIS.

Electric Railway Company Awards Contract to a Southern Contractor for 250-Mile Road.

A report from Kansas City says that the St. Louis & Kansas City Electric Railway Co. has awarded contract to the National Contracting Corporation of Norfolk, Va., for the construction of its 250-mile line between Kansas City and St. Louis, Mo., and that Griffith & McMurray of Kansas City, who have a subcontract, have already begun construction on the road east of Independence, Mo. J. E. Cole of Norfolk is president, and M. M. Parker of Washington, vice-president of the contractor company. D. C. Nevin is president, John H. Berkshire vice-president, W. I. Allen general manager and George A. Anderson secretary and treasurer of the railway company, whose offices are in the New York Life Building at Kansas City.

This railway, which has been projected for several years, is to be a double-tracked line operated with high-speed cars. Passenger, freight and express service will be conducted. Although the entire route has not been located, it is said that it will be as near as possible a direct line. It is further stated that the railway company has an option from the Kansas City Southern Railroad upon the old route of the Kansas City, Pittsburgh & Gulf Railway between Kansas City and Independence, about 10 miles, and that this may be used to enter the city.

CITY RAILWAY AND DOCKS.

Pensacola to Build Belt Line and Other Port Facilities to Cost \$100,000.

Pensacola has voted to issue \$400,000 of city bonds for the construction of a public belt line of railroad and municipal docks and wharves, the former to handle cars to and from any railroad line entering the city, and the later to accommodate any vessels entering the port. The belt line will reach the wharves and docks, so that there can be an immediate interchange of freight between the land and the water transportation facilities.

It is stated that the vote in favor of the bonds was almost four to one. The board of bond trustees will have charge of the sale of the securities to be issued, and also of the construction of the wharves, as well as of the railroad. The city already owns property on which the wharves can be built. It is expected that they will be at the foot of Cevallos street.

New Equipment, Rails, Etc.

Atchison, Topeka & Santa Fe Railway, says a report, has ordered 43 more locomotives from the Baldwin Locomotive Works, Philadelphia.

Carolina & Northwestern Railway has ordered four consolidation locomotives from the Baldwin Works.

Chesapeake & Ohio and Louisville & Nashville, it is reported, will be in the market for more cars, the former for 3000 and the latter for 1500, for which specifications are being prepared.

Illinois Central Railroad's rail contract for 1913 will include 50,000 tons, it is reported.

Monongahela Valley Traction Co., Fairmont, W. Va., will purchase four inter-urban electric cars.

Newbern-Ghent Street Railway Co.,

Newbern, N. C., has ordered two more cars, one single truck and one double truck. They are operated with storage batteries.

Paducah Traction Co., Paducah, Ky., has ordered six single-truck cars 30 feet long, pay-as-you-enter type, from the St. Louis (Mo.) Car Co.

Rock Island lines are reported about to purchase 1000 box cars, 200 refrigerator cars and 50 cabooses. They have ordered 500 gondola cars from the Standard Steel Car Co., Pittsburgh.

The Baldwin Works built 1618 locomotives during 1912, or 180 more than in 1911, according to a statement published in Philadelphia, where they are. There is a large number of orders on hand for this year's delivery.

The recent equipment orders for the Harriman lines covered 12,733 cars, including the following: 3290 box cars, single sheathed; 3100 double sheathed box cars, 2280 drop-bottom gondolas, 1550 single-deck stock cars, 800 automobile cars, 500 flat cars, 500 single-deck 40-ton stock cars, 400 hopper coal cars, 203 oil cars, 12,500 gallons capacity, and 110 eight-wheel cabooses. The locomotive orders for these roads, as heretofore stated, covered 246 engines, the Baldwin Works and the American Locomotive Co. each getting about half. It is reported that about 2000 more cars will be bought

Cheat Haven to Ice Ferry.

A report from Kingwood, W. Va., says that the Cheat Haven & Bruceton Railroad, chartered by Pittsburgh business men, and which is constructing eight miles of line along the right bank of Cheat River from a connection with the Baltimore & Ohio Railroad to Ice Ferry, W. Va., where a large hydro-electric plant is being built, is backed by the Kendall Lumber Co., which has operated extensively in Garrett county, Maryland, and Somerset county, Pennsylvania, along the Youghiogheny River. The company has 25,000 acres or more on the Cheat River almost adjacent to its previous operations. The road will be of standard gauge.

Much of the territory is underlaid with the Pittsburgh and Freeport seams of coal, and a coal development is also planned. The road reaches the immense power dam being constructed by the Kuhn interests of Pittsburgh.

Incidental to the surveys of the new road, the engineers have discovered the ruins of the Ben Davis furnace, which was abandoned about 1811; of the Henry Clay furnace, built about 1835, and later Anna and Luella furnaces, all charcoal burners. Here also was a nail mill that, prior to 1844, sent its product to Pittsburgh and down the Ohio River.

Several New Texas Roads.

Maryland & Pennsylvania Railroad has sold 50,000 of 5 per cent. equipment bonds to purchase 25 steel underframe box cars, a passenger car, a switching locomotive and a road locomotive. Contracts are said to be awarded.

Ed. Kennedy, Houston, Tex., who is now president of the Orange-Northeastern Railway, a new enterprise in the eastern part of Texas and extending into Louisiana, graded during the past year 84 miles of other railroad line from Memphis to Lubbock, Tex., which will be taken over by an Eastern syndicate. It is now known as the Altus, Lubbock, Roswell & El Paso Railway, and it is intended to soon begin tracklaying thereon. He is also president of this company. Mr. Kennedy, it will be remembered, constructed 60 miles of railroad from Altus, Okla., to Wellington, Tex., which was purchased

by the Missouri, Kansas & Texas Railway interests, it being now part of that system.

Taylorsville to Jeffersontown.

Rowland Cox, chief engineer Shelbyville & Frankfort Electric Railway, Taylorsville, Ky., says that the Taylorsville & Jeffersontown Electric Railroad is now being surveyed. It will be about 21 miles long, and will connect with the Louisville city railway at Jeffersontown, Ky. The survey parallels the Louisville & Taylorsville turnpike most of the way, and runs through some of the best dairy farming country in the State. Mr. Cox is chief engineer of the new enterprise, and he reports that the line will have an easy grade. Most of the right of way has been given. The road will shorten the distance to Louisville about 18 miles.

Railroad Notes.

The Gulf, Florida & Alabama Railway has begun the regular operation of its line from Pensacola, Fla., to Jonesville, Ala., 70 miles, according to a report from Pensacola. A schedule will now be maintained.

The Newbern-Ghent Street Railway Co., Newbern, N. C., has filed a mortgage to secure \$60,000 of bonds upon its newly completed line with the Virginia Trust Co. of Richmond as trustee. It is stated that more bonds can be issued if new lines are built at the rate of \$12,000 per mile.

The property of the Birmingham & Gulf Railway & Navigation Co., Tuscaloosa, Ala., which was sold recently under an order of court, has been purchased by Morris Bros., bankers, of Philadelphia, who, it is said, will immediately fulfil their plans to convert the railway to electric operation and make other improvements.

Glass Bottom Yacht for Florida Waters.

One of the attractions to be found at Miami, Fla., this winter will be the yacht Vidi, built especially for the use of tourists and others interested in viewing fish and other marine life through a glass bottom of the vessel. The well-known principle of the water glass is applied in the case of this vessel on a large scale. The vessel is fitted with glass plates one inch thick on each side of the bottom for a space of two feet wide by 25 feet long, so arranged that in case of breaking the opening may be readily closed and sealed.

This yacht was built by Philadelphians, and is now on the way to Miami. It is 52 feet long, 16 feet beam, and is equipped with submarine lights which may be let down below the bottom to illuminate the depths so that objects may be plainly seen. The vessel will be operated by Captain Townsend of Miami, Fla., and is expected to prove of particular interest during the winter season.

How to Sell Property.

Mr. Wm. S. Penick, of Penick & Ford, Ltd., molasses and syrups, New Orleans, La., writing under date of December 31, 1912, says:

"Some years ago we had a candy plant in Memphis, Tenn., which we wanted to dispose of, and wrote out an advertisement somewhat similar to the one we are now enclosing, and it resulted in the satisfactory disposition of the plant in question almost immediately. Therefore we feel encouraged to hand you the enclosed advertisement, with request that you publish it once in your 'For Sale' column."

The output of the furniture factories at High Point, N. C., last year had an aggregate value of \$8,500,000. The aggregate payroll of all the city's industries was \$2,353,000.

MINING

Phases of Coal Production.

In a review of the coal production of the country in 1912 Edward Wheeler Parker of the United States Geological Survey says that the developments in what is known as the Elkhorn coal field, in Southeastern Kentucky, which have been actively pushed during the last two years, are expected to be in full running order in the spring of 1913, and will swing the major production of the State from the western to the eastern district. Up to the present time the larger part of the production has been derived from the western counties, and in 1912, out of an estimated output of 14,000,000 tons, the western counties have contributed over half, or, say, 7,500,000 tons, as compared with 6,500,000 tons from the eastern counties.

West Virginia increased its output over 1911 in spite of labor troubles, and the quantity of West Virginia coal made into coke increased. New developments are under way on the upper part of Paint Creek and portions of Coal and Guyandotte rivers.

Southwestern Virginia increased its production by probably as high a percentage as that reached in any other State or district. Some of the mines in Wise county (the source of more than 50 per cent. of the State's total) increased their production over 100 per cent., and most of the important operations added as much as 25 per cent. to their output in 1911. Virginia's production has increased with annual regularity, the State being an exception to the generally decreased production in 1911. The record for 1912 will surpass all others and probably show a tonnage double that of 1908, when it amounted to 4,260,000 short tons. The supply of coal cars was generally fair, but a shortage of coke and box-car equipment prevented taking full advantage of the boom in the coke market during the latter part of the year.

Alabama mined the largest tonnage in the history of the State, and the operators are continuing new development and openings for large output are being made, especially on the Louisville & Nashville and the "Frisco" systems, this work being done in anticipation of an enlarged market upon the completion of the Panama Canal. One Alabama company has contracted for 40,000 tons of coke for shipment to Mexico in 1913, and hopes to secure a much greater tonnage to that country. Other contracts already made swell the total sales to Mexico to about 100,000 tons. The markets for Alabama products have expanded, particularly in the last three months of the year, owing to substantial advances in the prices of New River and Pocahontas coal and coke. Several large coal-washing plants have been constructed, and more are in contemplation, in order to meet the demand for a better product. This applies especially to "Big Seam coal." The production for December will be cut down somewhat by the destruction by fire of the surface improvements at the Banner mine, which normally produces a large tonnage.

Little change in the output in Maryland, Tennessee and the Southwestern States of the South is noted.

Iron Ore Production in 1912.

Preliminary estimates of iron ore mined in 1912, based on the quantity mined during the first 11 months of the year, plus estimates for the month of December, were received by the United States Geological Survey from 26 of the largest iron-mining companies in the United

States at the close of the year. As the combined output of these 26 companies represents more than 80 per cent. of the iron ore mined in the United States, it is considered that the condition of the industry is fairly well gauged by their production, especially as both the Lake Superior and the Birmingham districts are well represented.

The average increase in production of iron ore by these representative companies was 26.6 per cent. Certain companies showed a decided decrease in production and others reported as much as 80 per cent. increase, but the outputs of such companies as reported abnormal production are not sufficiently great to largely affect the grand totals.

From the returns received it is estimated by E. F. Burchard of the Geological Survey that the total quantity of iron ore mined in the United States in 1912 was between 54,500,000 and 57,500,000 long tons. This quantity represents an increase of between 25 and 32 per cent. compared with the production in 1911, which aggregated 43,550,633 tons. It is therefore possible that the high record of iron-ore output attained in 1910, viz., 56,889,734 long tons, may be slightly exceeded, although the returns received thus far, which are only approximate figures, are not quite sufficient to justify a definite comparison with the figures for 1910. Red and specular hematite constituted about 90 per cent. of the output, most of the remaining 10 per cent. being divided about equally between limonite, or brown ore, and magnetite, with a very small quantity of siderite, or spathic ore.

In the Lake Superior district the production of iron ore apparently increased in slightly greater proportion than the average for the country at large, the total shipments having increased from 32,783,163 long tons in 1911 to nearly 48,750,000 tons in 1912, but there were very large stocks of ore, amounting to more than 11,000,000 tons, at the mines in the district at the close of 1911, and these stocks may have been depleted in making the record shipments of 1912.

Production in the Birmingham district, Alabama, was largely increased in 1912, especially through the large output of the Red Mountain group of Clinton hematite mines operated by the Tennessee Coal, Iron & Railroad Co. The production in Tennessee, North Carolina and Virginia apparently has not greatly increased, if at all, above that of 1911, probably because some of the blast furnaces in these States dependent on local ores were not in operation during the early part of 1912, and in the South the inactivity of blast furnaces is quickly reflected in the operations of the iron mines.

Compared with the production of pig-iron in the United States in 1912, which probably approximates 29,300,000 tons and exceeds the record production of 1910 of 27,303,567 tons by nearly 2,000,000 tons, a larger production of iron ore might appear to be indicated than has been estimated above, but here again must be considered the large mine stocks of ore in the Lake district and also the fact that more than 2,000,000 tons of foreign iron ore were imported for the manufacture of pig-iron in 1912.

A \$10,000,000 Coal Company.

The Carter Coal Co. has been incorporated with \$10,000,000 capital stock to develop coal lands in Virginia, West Virginia and Kentucky. George L. Carter of Johnson City, Tenn., is president. Referring to this corporation, a dispatch from Bristol, Va.-Tenn., is as follows:

"Looking to the development of extensive coal lands owned by George L. Car-

ter, and with a view to meeting the demands incident to the completion of the Panama Canal and the extension northward of the Carolina, Clinchfield & Ohio Railway from Dante, Va., to Elk Horn City, Ky., where that road will have a connection for the great lakes via the Chesapeake & Ohio Railway, the Carter Coal Co. was organized. J. C. Stone is vice-president and T. F. Davis is secretary-treasurer, both of Johnson City. Extensive mining plants will be established and equipped with labor-saving machinery on properties in the Clinchfield district of Virginia and in Eastern Kentucky and West Virginia. The new company will be one of the largest coal producers in the country, and will no doubt be an important factor in supplying trade that will be handled for the world at large through the Panama Canal. Mines will be opened in nine different counties, the most extensive probably being in the region of Dante, in Russell county, Va."

TEXTILES

Trion Company Improvements.

Referring to improvements, for which he is engineer in charge, J. E. Sirmine of Greenville, S. C., writes to the MANUFACTURERS RECORD as follows:

"The Trion Company, Trion, Ga., is now equipping hotel building, schoolhouse, storeroom, auditorium and gineries with sprinkler fire protection; also installing heating system in the hotel, store, schoolhouse and auditorium; extending and improving village fire protection; improving and modernizing fire protection equipment in some of the old mill buildings; also installing modern sanitary water-closets in connection with mill."

The Trion Company wired the MANUFACTURERS RECORD in September as follows:

"Improvements will cost about \$100,000 for village and about \$300,000 for new machinery and repairs to mill."

A \$500,000 Mill Company.

George W. Montcastle of Lexington, N. C.; Erlanger Bros. (B. V. D. Company) of New York and associates will organize a \$500,000 company (probably the Bel-Vi-Dere Mills) to build a 25,600-spindle and 700-loom mill at Lexington. They will erect buildings of brick construction, and have awarded contract for the textile machinery to the Howard & Bullough American Machine Co., Pawtucket, R. I. The engineer-architect in charge is J. E. Sirmine, Greenville, S. C., and plans include the construction of a model mill village, increasing the initial equipment to 40,000 spindles and 1000 looms and the erection within five years of another mill to have 40,000 spindles, etc. Mr. Montcastle was recently mentioned in connection with plans for a mill.

Highland Cotton Mills.

The Highland Cotton Mills, High Point, N. C., has been incorporated with a capital stock of \$100,000 by J. H. Millis, J. H. Adams, W. H. Ragan and others. This company will build the 10,000-spindle hosiery yarn mill previously reported as proposed by the High Point Hosiery Mills, of which J. H. Millis is president.

Unity Mill Additions.

The Unity Spinning Mills, Lagrange, Ga., writes to the MANUFACTURERS RECORD as follows:

"We have just finished installing eight new spinning frames and have six others in transit. After the installation of the six now en route we will have a total of 13,392 spindles. The addition has amounted to 3024. We had before the

additions 10,368. Our daily product will be increased by the total addition from 11,000 to 14,000 pounds daily. We have also just had eight new cards installed, making a total of 76 cars. The machinery was all furnished by the Saco-Lowell Company. We have been employing 280 hands. Expect to employ about 300 when the new machinery is all in."

For a Knitting Mill.

Paul Gilreath, Cartersville, Ga., writes to the MANUFACTURERS RECORD as follows:

"I am interested in the erection of a knitting mill, and would be glad to receive information in connection therewith. What I want now is information only, and would be glad that you put me in touch with proper parties if you can do so, and prefer to get in touch with some experienced man in the knitting mill business who would be interested in identifying himself with the business at this point."

Standard Processing Co.

The Standard Processing Co., Ridge-dale, Tenn., is progressing with the construction of its plant previously described. It will equip with a Butterworth warp mercerizer and accompanying boiling box, dryer, winding and unwinding machine, 10 Whitin quillers and four Foster winders. This company's warehouse is two stories high, 100x45 feet, and its boiler-house is about 41 feet square. Its 150-horse-power return tubular boiler is being furnished by the Lookout Boiler & Manufacturing Co. of Chattanooga.

Adding 1500 Spindles, Etc.

The Yazoo Yarn Mill, Yazoo City, Miss., writes to the MANUFACTURERS RECORD: "We do not contemplate any new buildings, but are adding 1500 spindles, with the necessary cardroom machinery, overhauling and increasing our steam power plant, and have contracted for all; approximate cost of machinery, \$14,000; engineer-architect in charge, John Hill of Atlanta, Ga." This company was incorrectly mentioned last week as to build another mill.

Dacotah Mill Enlargement.

The Dacotah Mills, Lexington, N. C., writes to the MANUFACTURERS RECORD: "We have purchased 4800 spindles and 150 looms for addition and the extension to mill 70x101 feet, three stories, will be done by local contractors."

This company was previously referred to as expecting to add 4800 spindles and 200 looms next spring.

New Equipment Costing \$4000.

The Southern Mills Corporation, Oxford, Ala., writes to the MANUFACTURERS RECORD: "We are putting in 1000 spinning spindles and 200 twister spindles; cost of these machines about \$4000. We expect to make coarse yarn and twine on these machines; 1000 pounds daily; we are employing 100 hands."

Adding 5000 Spindles.

The Villa Rica (Ga.) Cotton Oil Co. writes to the MANUFACTURERS RECORD: "Increasing spinning plant from 2500 spindles to 5000 spindles; will finish all product in skeins, numbers from 8s to 16s cotton yarn; new mill will be in operation by February 1." (This company recently mentioned as to double its capacity.)

The Cotton Movement.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during the first four months of the present season was 9,568,-

150 bales, a decrease under the same period last year of 78,438 bales. The exports were 5,301,106 bales, an increase of 137,397 bales. The takings were, by Northern spinners, 1,289,457 bales, an increase of 49,794 bales; by Southern spinners, 1,293,638 bales, an increase of 241,809 bales.

Wants Cotton Yarn.

The American Tape Co., 191 Marietta street, Atlanta, Ga., writes to the MANUFACTURERS RECORD: "We are in need of a considerable quantity of 30s single warp bleached cotton yarn on six-inch tubes."

Textile Notes.

The Western Guaranty & Trust Co., Oklahoma City, plans the organization of a company to build a cotton mill.

The Ware Shoals (S. C.) Manufacturing Co. is progressing with the construction of a small additional mill.

The Manchester Woolen Co., St. Louis, has been incorporated with \$10,000 capital stock by Samuel J. Rovies and others.

The Mills Manufacturing Co., Greenville, S. C., contemplates increasing plant. It is now operating 31,000 ring spindles, 816 broad looms, etc.

The Southern Manufacturing Co., Athens, Ga., states it will not build another mill. It was reported last week as considering such an addition.

The Abbeville (S. C.) Cotton Mills writes to the MANUFACTURERS RECORD: "We have reached no decision regarding enlargement." This company was recently reported as to add 25,000 spindles and accompanying machinery.

The Hope Mills (N. C.) Manufacturing Co. writes to the MANUFACTURERS RECORD: "We have made no further plans regarding the enlargement of our plant." This company was previously reported as increasing its capital stock by \$150,000.

The Brevard (N. C.) Cotton Mills, executive offices at Greenville, S. C., writes to the MANUFACTURERS RECORD: "We are not in position to give out any statement at present relative to our enlargement. Our plans are not yet completed." This company was recently mentioned as considering an increase of equipment.

The Broad River Mills, Blacksburg, S. C., has organized with W. C. Hamrick, president, and D. C. Ross, secretary. This company acquires the Whittaker Cotton Mill, which it will thoroughly remodel and install new machinery, the latter having been purchased. Last week the new company was reported incorporated with \$50,000 capital stock.

The Virginia Woolen Co., Winchester, Va., writes to the MANUFACTURERS RECORD: "We are now installing three additional sets 60-inch cards, four new Johnson & Bassett mules, Pearsli dyeing machine and other equipment necessary to take care of our increased production. The building is practically completed, and we hope to have the machinery in operation by February 1." This company's enlargement plan was recently announced.

Tampa's Accomplishments.

Among the things done at Tampa in 1912 noted by the *Daily Times* of that city were the voting of \$1,700,000 for public improvements; work begun on a \$240,000 street bridge; completion of the first eight-story building in the city and work well advanced upon a \$300,000 10-story building; right of way acquired by city for entrance of future railroads; money provided for the construction of municipal docks; \$2,000,000 invested in building operations and 284,185,000 cigars manufactured.

MECHANICAL

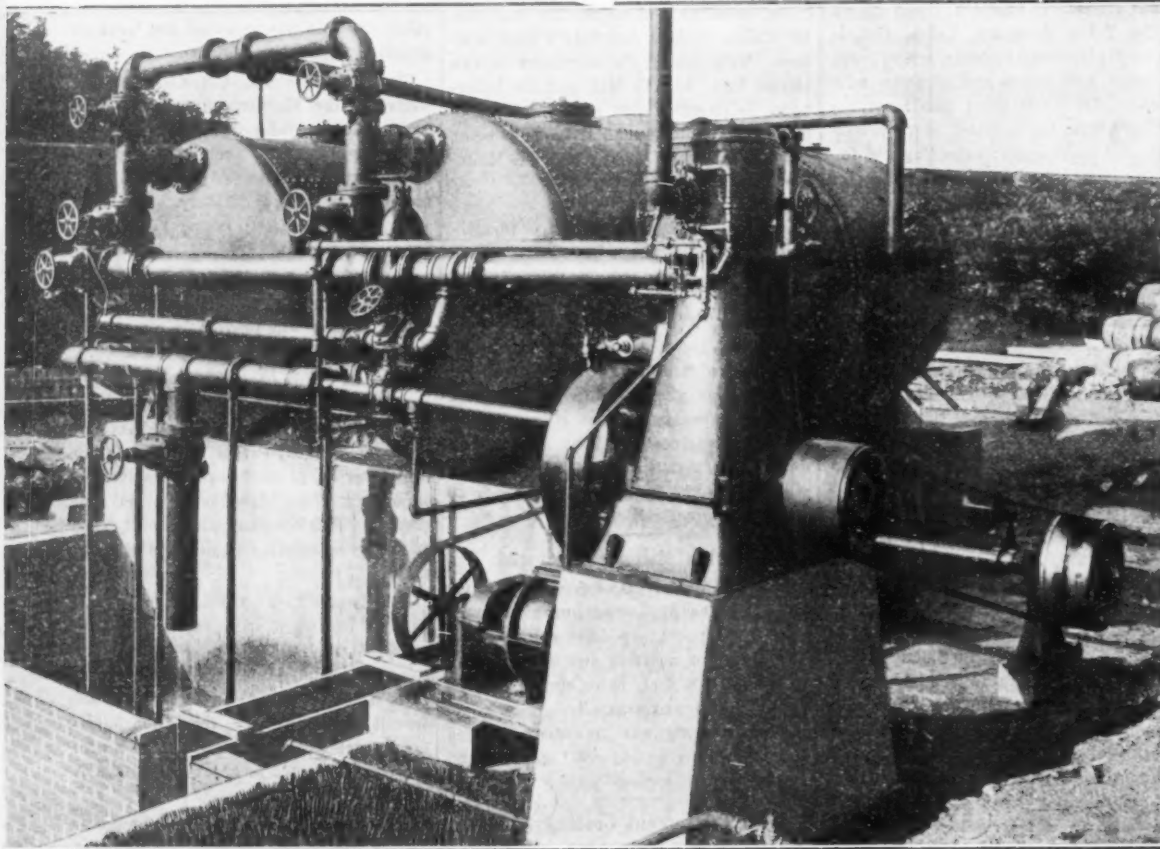
Sewage-Disposal Equipment.

The problem of the disposal of sewage of an offensive character has been a very serious one in municipal sewer systems, among glue factories, slaughter-houses, tanneries and the like, as the law in many cases prohibits the discharge of such sewage into lakes, rivers or running streams. These factories have frequently been obliged to collect the waste water in large settling tanks and then remove the sludge and scatter it over the ground to dry in the sunlight, or to compress and dry it, or in other cases to bury it in the ground. As all waste waters contain more or less animal and vegetable matter, the latter becomes decomposed and harmful, as well as being otherwise offensive, and the sanitary condition of the surroundings is impaired. These methods have proved to be very slow and expensive, as the sludge is in such condition that it could not be readily handled, and is a total waste to the factory.

A new departure in the disposition of sewage disposal has been invented by the engineers of Wm. B. Scaife & Sons Company of Pittsburgh, Pa. After a long

to clarify their sewage before discharging it into running streams. The boards of health in nearly all of the States are compelling factory managements to remove from waste waters all suspended matter of a decomposing nature.

In this process the sewage is pumped from a basin by a centrifugal pump through pressure filters until there is an accumulation of considerable thickness of detritus on top of the filter beds; then the water is drawn off back into the supply basin and compressed air introduced to force out the remaining water and to dry out the detritus, which thereupon becomes a flexible cake on top of the filter bed. This cake may then be rolled up and removed, as the filters are provided on the outer side, on a line with the top of the filter bed, with a row of hinged manholes, which can be opened quickly and the suspended matter taken out. This is then put in a press, where the balance of the water or moisture is squeezed out; then it is dried, and ground, if necessary, and sold for fertilizer or other use for which it may be suitable. The value of this product, which was formerly wasted, makes a good investment on the cost of the installation, instead of a large expense, with no income whatever, as formerly.



SEWAGE DISPOSAL APPARATUS.

series of exhaustive experiments a plant was installed having a daily capacity of 1,000,000 gallons for the Russia Cement Co., glue manufacturer, of Gloucester, Mass., to test out the practical merits of the process. The results obtained exceeded the original expectations.

The apparatus shown in the accompanying illustration is especially adapted for separating and removing the soluble matter from sewage and other waste waters carrying liquid discharges; also for providing for forcing out the liquid part of the waste by compressed air, leaving the insoluble matter in a comparatively dry and solid state, which renders it readily removable from the apparatus employed. A further object is to provide for separating and saving the sedimentary portion of the waste from sewage where desirable, and to render harmless the sewage from such plants as are under legal obligations

The operation of the plant is described as simple, and comparatively inexpensive.

The apparatus utilizes two or more tanks, so that while one is receiving the waste and is filling, the other may be cut off from the supply and used for the process of separation. For this purpose the piping and valves are arranged so that there is no interruption in the receipt of waste from the supply, and the operation of the apparatus is continuous. The handling of detritus in the form of wet sludge is also avoided, and the material is in such form that it is easily handled, removed and used. The decomposed part of the sewage is also removed, thereby avoiding offensive smell. The balance of the waste water may be treated chemically, if necessary.

Oil-Burning Dinkey Engines.

A locomotive designed to fill the demands for a reliable, sturdy, light, oil-

burning Dinkey engine is shown in the accompanying illustration as manufactured by H. W. Bell & Co., Yonkers, N. Y. The engine is of the regular locomotive type, except that it is built in one unit. The engine is geared to one axle, and the



HAULING WITH OIL-BURNING DINKEY ENGINE.

gears, cranks and bearings run in oil. Stuffing boxes are accessible without disturbing the oil compartment. The boiler is of the vertical fire-tube type, and is located over the engine and about the cen-

gauges, etc., are placed on a steel dashboard at the driver's side.

The engine shown in the illustration is in operation on the Catskill Aqueduct construction work, and is owned by W. C. Baxter of Pleasantville, N. Y.

It is claimed the machine will pull a net load of about 60 tons on a level track, and may be operated with load using gasoline for fuel at about four cents per mile, or with crude oil at about two cents per mile. The specifications for 5000-pound Dinkey engine of this type, loaded weight 6500 pounds, include a wheel base of 5 feet; wheels, 20 inches in diameter; length over all, 9 feet; two cylinder, $4\frac{1}{2} \times 6\frac{1}{2}$ inches, high pressure, double-acting; a vertical type boiler 26 inches in diameter, tested to high pressure; maximum speed with load, 15 to 20 miles per hour, depending on track conditions.

Milwaukee Corrugating Co.'s New Plant.

The new plant of the Milwaukee Corrugating Co. at Milwaukee, Wis., shown in the accompanying illustration, with which the company is starting the new year, has been built to provide for the increasing demand for floor space. Starting about 10 years ago, the company supposed that provision had been made for a long period, but its rapidly increasing business has required the development of this new plant, which is said to be as nearly perfect and as complete as modern methods can make it. The new factory contains special automatic machinery for manufacturing gutters, Interlock conductor pipe, Titelock shingles, Invisible Joint metal ceilings, one-piece elbows, mitres, cave-trough hangers, etc. The building is of steel and brick construction, with saw-tooth roof. Skylights and windows are liberally provided, thus insuring a proper amount of light and air. The power-house and offices are separated from the main building, and are carefully arranged for the purposes intended.

The company will have a floor space of 250,000 square feet, enabling it to carry much larger stock than before. The plant is located on the lines of two important railroads, so that the movement of freight can be expeditiously made.



NEW PLANT OF MILWAUKEE CORRUGATING COMPANY.

across the machine, so that the driver can see in either direction and is permitted to sit very low. Injectors, water glass,

It is now prepared to demonstrate what capacity, service, experience and low manufacturing cost can do for its patrons.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "It is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription to the Daily Bulletin is included for the contract period.

BRIDGES, CULVERTS, VIADUCTS

Ky., Lexington.—J. E. Cassidy, Mayor, will recommend construction of two viaducts in western section of city.

Mo., Albany.—Gentry County Commissioners will construct steel span bridge; 100 feet long; 30-foot wooden approach on each end; substructure to consist of steel tubes 36 inches by 26 feet; John B. H. Ray, engineer, Albany.

Tenn., Sparta.—Tennessee, Kentucky & Northern Railroad Co., Geo. A. Clark, president, will build eight steel bridges and one short tunnel on proposed railroad from Sparta to Rock Creek, Tenn.

Tex., Dallas.—City and Gulf, Colorado & Santa Fe Railway, F. Merritt, chief engineer, Galveston, Tex., will construct viaduct across tracks at Merlin St.; main span to be built by railroad and approach at either end by city; estimated cost, \$100,000, of which railroad's part will be \$60,000 and city's part \$30,000 to \$40,000.

Tex., Dallas.—City Commissioners approved contract of Estep & Jones at \$7497.50 for construction of concrete culvert on Haskell near Ross Ave.

Tex., Denison.—Red River Bridge Co. will expend \$60,000 to construct bridge across Red River. (Company recently noted organized to construct bridge.)

Va., Richmond.—Atlantic Coast Line Railroad, E. B. Pleasants, chief engineer, Wilmington, N. C., contemplates constructing bridge at Grossman's Crossing.

CANNING AND PACKING PLANTS

Ala., Empire.—North Jefferson Orchard & Canning Co., O. H. Rowe, president, and A. A. York, secretary, will install small cannery; was recently noted incorporated. (See "Land Developments" and "Machinery Wanted.")

Md., Baltimore.—Canton Company of Baltimore, Commerce and Water Sts., awarded contract to Charles L. Stockhausen, National Marine Bank Bldg., Gay and Water Sts., Baltimore, to erect packing-house at Alliceanna and Chester Sts.; five stories; 45x115 feet; brick and steel; mill construction; composition roof; steam heat; electric lighting; estimated cost, \$40,000; D. E. Foote & Co., Inc., 2023 Alliceanna St., oyster and fruit packers, will operate plant. (Recently mentioned.)

Md., Fruitland.—W. S. Moore will erect canning plant, 24x36 feet, with sheds, and 36x42-foot warehouse; latter to have cement floors; fireproof construction; install 50-horse-power boiler. (Previously noted.)

Miss., Hattiesburg.—Armour & Co. (main office, Chicago, Ill.) will, it is reported, erect plant.

N. C., Salisbury.—Jas. H. Warburton, secretary Salisbury Industrial Club, states establishment of cannery and cold-storage plant is contemplated; present proposition is for company with \$25,000 or more capital to operate both plants in connection, erect brick buildings; \$15,000 for canning plant, \$10,000 for cold storage. (See "Machinery Wanted.")

CLAYWORKING PLANTS

Fla., Bradenton.—Bricks, etc.—E. E. Chapman of Bradenton and James E. Brown of Philadelphia, Pa., will establish brick plant; daily capacity, 25,000 bricks; will also manufacture concrete blocks and mosaic tile; machinery partly purchased.

of Johnson City, Tenn.; install extensive coal-mining plants in Clinchfield district of Virginia and in eastern Kentucky and West Virginia; open mines in nine counties; most extensive probably near Dante, Russell county.

Va., Roanoke.—Hazard Coal Land Co., capital stock \$100,000, incorporated; W. J. Brown, president, Bristol, Va.; J. B. Fishburn, vice-president, and D. D. Hill, Jr., secretary-treasurer; both of Roanoke, Va.

CONCRETE AND CEMENT PLANTS

Fla., Bradenton.—Concrete Blocks and Tile.—E. E. Chapman of Bradenton and James E. Brown of Philadelphia, Pa., will establish plant to manufacture concrete blocks and mosaic tile. (See "Clayworking Plants.")

Tenn., Memphis.—Lime and Cement.—Wright Lime & Cement Co., capital stock \$50,000, incorporated by Steve M. Wright, Fred W. Cubbins, J. E. Trezevant and others.

COTTON COMPRESSES AND GINS

S. C., McCormick.—Farmers' Gin Co., capital \$3000, incorporated; T. J. Pierce, president; M. L. B. Sturkey, vice-president; F. C. Robinson, secretary and treasurer.

Tenn., Lynnville.—J. D. Rhea, Buford, Tenn., will rebuild cotton gin recently reported burned; semi-fireproof construction; install 2-60-saw gin complete with cistern-house of galvanized iron; machinery bids opened in about 20 days. (See "Machinery Wanted.")

Tex., Laveria.—Laveria Farmers' Ginning Co., capital stock \$10,000, incorporated by Frank Koepf, William Engelhardt and C. F. Dieckow.

Tex., Saspanco.—Saspanco Gin Co. organized with W. D. Malone president, L. W.

Tex., Balmorhea.—Mountcastle Irrigation Co. acquired 5000 acres additional land and will extend irrigation system.

Tex., Garwood.—Garwood Irrigation Co., Hamilton, O., will construct irrigation system.

ELECTRIC PLANTS

Ark., Camden.—J. T. Gaughan, T. J. Watts and Harry Solmson, trustees of Myar estate, are having plans prepared for building, and will install equipment of present electric-light plant and water-works; two plants to be operated jointly.

Ark., Little Rock.—Arkansas Electric Co., capital stock \$20,000, incorporated; C. J. Dolls, president; J. H. Carmichael, vice-president; Nicholas Campbell, secretary-treasurer.

Fla., Alachua.—City has, it is reported, awarded contract to J. B. McCrary Company, Atlanta, Ga., to construct electric-light and water systems; cost about \$26,000.

Fla., Fellsmere.—Fellsmere Electric Light & Ice Co., capital stock \$25,000, incorporated by G. W. Boynton of Caribou, Me., and associates; will build electric-light and ice plants.

Ga., Jonesboro.—City votes January 21 on \$10,000 electric-light bond issue. Address The Mayor.

Ga., Rome.—City engaged Solomon & Norcross Company of Atlanta, Ga., to submit estimate of cost of building electric-light plant. (Recently reported as contemplating \$40,000 bond issue.)

Ky., Hazard.—E. A. Pollard and James Williams of London, Ky., will establish electric-light plant.

Ky., Munfordville.—P. K. Hubbard, C. D. Hickey, C. C. Winston and associates are incorporators of Munfordville Electric Light & Power Co., recently reported incorporated to construct electric-light system; capital stock, \$5500.

Ky., Somerset.—Sargent & Lundy, Jackson and Michigan Bldgs., Chicago, Ill., state they are now preparing plans and specifications for proposed installation of new boiler and 500-kilowatt turbo-generator in present building of Electric Light & Power Co. (Kentucky Utilities Co., Lexington, Ky., recently noted as planning improvements at Somerset, etc.)

Md., Annapolis.—W. E. Davis, representing Cleveland Construction Co., Cleveland, O., and Annapolis Public Utilities Co. will submit proposition to City Council for constructing electric-light system.

Md., Baltimore.—Electrical Commission, Raleigh C. Thomas, chief engineer, will expend \$500,000 during present year in providing underground conduit system; provided for out of \$2,000,000 loan authorized at November election.

Md., Mount Airy.—Mount Airy Ice, Laundry & Electric Co., capital stock \$12,000, organized by George W. Runkles and Emory Wagner; will build electric-light, laundry and ice plants. (See "Ice and Cold-storage Plants.") (Recently mentioned.)

Mo., Pacific.—Pacific Electric Co. secured franchise to construct street-lighting system; W. M. Thomas, chief engineer.

Mo., Rich Hill.—City Council engaged Rollins & Westover, Midland Bldg., Kansas City, Mo., to prepare plans and estimates and supervise construction of electric-light system.

N. C., Wilson.—City contemplates voting on \$100,000 bond issue to enlarge electric-light plant and improve streets; is having plans prepared by Benton & Moore, Wilson, for power plant; 99x111 feet; fireproof construction; clay-tile roof.

Okla., Collinsville.—City will make extension to light and water-works plant; cost \$20,000; W. F. Keller, engineer in charge; W. B. Erwin, Mayor. (See "Water-works.")

Okla., Stonewall.—City voted to construct electric-light and power plant; funds available. Address The Mayor.

S. C., Camden.—City awarded contract to Tucker & Laxton of Charlotte, N. C., to construct electric-light plant and water-works; engineer, Gilbert C. White of Charlotte, N. C. (See "Water-works.")

Tenn., Dunlap.—City contemplates building electric-light plant. Address The Mayor.

Tenn., Memphis.—Stanley H. Trezevant and George H. Alban, representing Northern capitalists, submitted proposition to City

PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGE 78 and 79

In order to secure best bids from leading engineers, contractors and investment houses, the proposal advertising columns of the Manufacturers Record are invaluable.

Rate 20 cents per line per issue.

When Proposal Advertisements cannot be sent by mail in time to secure insertion before date for opening bids, please wire advertisement copy collect by Day Letter

Proposal Advertising forms close Wednesday, 10 A. M.

Ky., Louisville.—Bricks.—Hillenbrand Brick Co. contemplates increasing capacity of West End plant from 25,000 to 50,000 bricks; purchased East End yard of Hydraulic Brick Co.; probably install mud machine in West End yard.

Miss., Hattiesburg.—Bricks.—I. V. Austin and associates purchased properties of Leaf River Gravel Co. for about \$60,000 and will develop; install brick-manufacturing machinery.

Tenn., Puryear.—Fire Bricks.—Puryear Utility Co. will be incorporated; purchased plant of Dixie Fire Brick Co. and will operate.

COAL MINES AND COKE OVENS.

Ark., Bonanza.—Woodson-Strickland Coal Co., capital stock \$5000, incorporated; M. M. Woodson, president; J. W. Strickland, secretary-treasurer.

Ky., Harlan.—Clover Fork Coal Co. purchased, it is reported, 500 acres coal land; reported purchase price, \$40,000 to \$50,000.

Ky., Williamsburg.—Mammoth Blue Gem Coal Co. increased capital stock from \$10,000 to \$25,000.

Okla., Henryetta.—Deep Fork Coal Co., capital stock \$10,000, incorporated by C. H. Kellogg, J. H. Savage and R. W. Sweet.

Okla., Lehigh.—Gulf, Colorado & Santa Fe Railway Co., F. Merritt, chief engineer, Galveston, Tex., is reported to have purchased (from Missouri Pacific Railroad) 10,000 acres coal land with mines producing 2000 tons daily and planning to open two additional shafts, increasing daily output to 4000 tons.

Va., Dante.—Carier Coal Co. incorporated with capital stock of \$10,000,000; president, George L. Carter; vice-president, J. C. Stone; secretary-treasurer, T. F. Davis, all

Winters vice-president and secretary, F. F. Bradley treasurer; will operate gin; plant erected. (Recently noted incorporated with \$10,000 capital stock.)

Tex., Tuleta.—O. L. Taylor of Devine, Tex., will build cotton gin; four stands of 70 saws.

COTTONSEED-OIL MILLS

N. C., Selma.—H. M. Nowell and R. A. Winston will build and equip 4-press cottonseed-oil mill. (See "Machinery Wanted.")

Okla., Mangum.—Farmers' Cotton Oil Co., G. C. McKenzie, secretary and manager, states plans for rebuilding mill are not completed; Geo. Dasher, Chickasha, Okla., will probably have charge of maturing plans and specifications. (Recently noted.)

DRAINAGE AND IRRIGATION

La., Gilliam.—Subdistrict No. 1 of North Caddo Drainage District voted bond issue to clear Dooley Bayou and for other drainage work. Address District Commissioners.

Tex., Edna.—Jackson County Drainage District No. 2 will invite bids on construction of drainage system; district comprises about 18,500 acres; 210,000 cubic yards dirt to be removed. Address Drainage Commissioners.

La., Dalcour.—Fidelity Land Co., J. Wilfred Galdry, vice-president, is completing arrangements for reclamation of about 500 acres marsh land near Dalcour; after land is reclaimed will be divided into small tracts and developed for farming.

Tenn., Selmer.—E. G. Buck and Leon B. Withers, engineers, Jackson, Tenn., will make surveys preparatory to construction of drainage system in White Oak District in McNairy and Hardin counties.

Commissioners for erection of electric-light and power plant.

Tenn., Puryear.—Puryear Utility Co. will be incorporated; negotiating with Puryear Water & Light Co. for purchase of plant.

Tex., El Paso.—Rio Grande Valley Traction Co. will install 1200-volt generator in El Paso power-house and build transmission line costing about \$15,000; C. W. Kellogg, Texas manager Stone & Webster Engineering Corporation.

Tex., San Saba.—F. B. Hall of San Saba Light & Ice Co. states recently-noted incorporation relates to extension of franchise; extended for 50 years; plant in operation.

FERTILIZER FACTORIES

Fla., Ocala.—Blowers Lime & Phosphate Co. will be incorporated with A. C. Blowers president, St. Petersburg, Fla.; will build four limekilns; M. L. Chadman is also interested.

Fla., Pensacola.—E. E. Saunders & Co. will build glue and fertilizer plant; manufacture from fish.

Va., Reedville.—C. E. Davis Packing Co. will build plant costing \$12,000 to convert menhaden fish into fertilizer material and oil.

FLOUR, FEED AND MEAL MILLS

Ala., Birmingham.—Miller Grain & Commission Co., capital stock \$25,000, incorporated; W. L. Miller, president-general manager; L. J. Smith, secretary.

Ala., Birmingham.—William Cosby Flour & Grain Co., capital stock \$200,000, incorporated; W. M. Cosby, president; J. C. Hodges, vice-president; S. S. Godbee, secretary-treasurer.

Ky., Hopkinsville.—Acme Mills, capital stock \$150,000, incorporated by W. B. Anderson, Joe P. Duolop, Norman Smith, W. A. Chambers and J. M. Nebbett, all of Clarksville, Tenn.; acquired, for about \$50,000, plant of Acme Mills & Elevator Co., having daily capacity 1200 barrels flour.

Ky., Hopkinsville.—Hopkinsville Roller Mills, capital stock \$5000, incorporated by S. T. Hagan, B. L. Bradshaw and others.

Md., Mullinix.—Joseph H. Mullinix will rebuild flour, grist and sawmill recently burned at loss of \$8000.

Mo., St. Louis.—W. J. Hummelsheim, 4428-30 Gravois St., Gravois, will erect one-story mill; cost \$2500.

W. Va., Keyser.—W. B. Woolf Milling Co. purchased property of Keyser Milling Co. and will rebuild mill; probably increase capital stock and add other industries.

FOUNDRY AND MACHINE PLANTS

Ala., Attalla.—Car Wheels, etc.—Peacock Iron Works, C. B. Foreman, president, increased capital stock from \$100,000 to \$150,000; will build plant to manufacture car wheels and heavy castings. (Previously reported organized.)

Ala., Birmingham.—Rail Device.—Louis Lebovitz of Springfield, Mo., is reported as considering establishment of plant to manufacture patented device to prevent spreading of steel rails.

Ky., Pineville.—Spring Motors.—Cumberland Motor Co. (recently noted as being organized by Henry L. Pitman and others) opens bids February 1 to erect 50x100-foot brick building; opens bids about March 1 to install metal-working machinery, including automatic gear-cutting machines, lathes, shapers, screw and drilling machines, spring collars, etc.; manufacture spring motors for sewing machines and fans. (See "Machinery Wanted.")

La., New Orleans.—Cars.—New Orleans Railway & Light Co. will arrange for construction of car-building and repair shops; at present Magazine St. barn is being used for car-building purposes.

Md., Baltimore.—Machinery.—John B. Adt Company, capital stock \$160,000, incorporated by John B. Adt (332-342 N. Holliday St.), Albert W. Adt and Edwin B. Adt; continue established plant.

Md., Baltimore.—Bridge Shop.—Carnegie Steel Co. will rebuild burned 200x300-foot shop at Bush and Wisconsin Sts.; burned steel and corrugated iron, with wood roof and slag top; loss about \$50,000; erect temporary shop and contemplates rebuilding permanent shop, probably on larger scale; main office at Pittsburgh, Pa.

Md., Baltimore.—Blacksmith Shop, etc.—William E. Hooper & Sons, 55-56 Maryland Life Bldg., will build blacksmith shop, garage and transformer-house on Parkdale Ave; one story; brick; 76.2x24 feet; contractor, Henry Smith & Sons Co., 111 Hanover St., Baltimore.

Miss., Hattiesburg.—Sawmill Equipment, etc.—W. E. Morris of L. N. Dantzer Machine & Foundry Co. and associates, Gulfport, Miss., purchased half interest in Watkins Machine & Foundry Co.; will repair present equipment and install additional machinery.

Mo., Kansas City.—Filling and Gunning Machines.—Joseph W. Ivy, manager Kansas City office, American Cast Iron Pipe Co., 715 Scarritt Bldg., is interested in proposed organization of company to promote gin-saw filling and gumming machine.

Mo., St. Louis.—Shoe Machinery.—American Shoe Machinery & Tool Co. awarded contract to I. Sigel, 511 Central National Bank Bldg., St. Louis, to erect plant; brick; two stories; 50x100 feet; plans by William Wedemeyer, 105 N. 7th St., St. Louis.

Mo., St. Louis.—Railroad Tie Plates and Spikes, etc.—Elyria Iron & Steel Co. of Elyria, Ohio, contemplates, it is reported, establishing plant.

Mo., St. Louis.—Sash Weights.—Western Foundry & Sash Weight Co., 151 Miller St., will build addition to foundry; cost \$2700.

N. C., Wilmington.—Engines.—Eagle Iron Works, capital stock \$125,000, incorporated to manufacture rotary engines; later will manufacture engine for electric headlights for locomotives; secured five-year lease on machine shops at Front and Hanover Sts.; M. M. Parker, Jr., president; J. W. Curtis, vice-president-general manager, and J. M. Hines, secretary-treasurer.

Tenn., Chattanooga.—Air Hammer Rock Drills, etc.—Smith Drill & Machinery Co. will be incorporated by G. W. Smith, D. F. Beckham, J. C. Quentel, S. W. Thompson and Byron Gager; acquire Smith Drill & Machine Co.'s plant.

Tenn., Chattanooga.—Iron Works.—White-Starr Iron Works, 421 Elm St., succeeds William White & Sons; plant equipped and in operation; general jobbing in gray iron, brass and aluminum castings; H. A. Starr, president and treasurer; W. E. White, vice-president; C. A. White, secretary. (Recently noted incorporated with \$25,000 capital stock.)

Tex., Dallas.—Cotton Choppers.—Planters' Cotton Chopper Co., capital stock \$100,000, incorporated by James A. Stevenson, W. M. Moore and J. A. Van Winkle.

Tex., Plano.—Cotton Harvester.—Plano Cotton Harvester Co., capital stock \$1500, incorporated by W. A. Patterson, M. R. Kendrick and R. W. Standifer.

Va., Richmond.—Stoves.—Cameron Stove Co. will build machine shop; recently mentioned. (See "Warehouses.")

Va., Roanoke.—Foundry, etc.—Chauncey Lobingier, 314 Frick Bldg., and George L. King, Apollo Bldg., both of Pittsburgh, Pa., are planning organization of company to operate Loucks Iron and Steel Works, recently purchased by capitalists they represent.

GAS AND OIL ENTERPRISES

Ark., Warren.—Company organized with Fred L. Purcell president, H. H. Harrington vice-president, Carl Hollis treasurer, and P. A. Butler secretary, to drill for oil and gas.

La., Vinton.—Wells.—Vinton Crude Oil Co. organized with W. H. Starks, president, Orange, Tex.; Charles R. Benckenstein, vice-president-general manager; J. T. Shelby, treasurer, and J. S. Sneed, secretary, all of Lake Charles, La.; secured lease of 2 1/2 acres in Vinton oil field, and will continue development.

Md., Baltimore.—Gas Plant.—Consolidated Gas, Electric Light & Power Co., Lexington and Liberty Sts., awarded contract to Dietrich Bros., Pleasant and Davis Sts., Baltimore, to erect boiler-house on Heath St.; one story; 51x36.9 feet; structural steel.

N. C., Wilson.—Gas.—City contemplates voting on \$35,000 bond issue to construct gas plant. Address The Mayor.

Okla., Bartlesville.—Paul Oil & Gas Co., capital \$25,000, incorporated by C. J. Bury, Bartlesville; G. W. and R. G. Uhl, Owasso, Okla.

Okla., Bliss.—Wells.—Bliss Petroleum Co. opens bids January 15 for drilling oil wells; probably construct 15 miles of 3-inch pipe line; capacity about 5000 barrels oil; H. Heberling and G. L. Miller, engineers in charge. (See "Machinery Wanted.")

Okla., Comanche.—Comanche Oil Development Co., capital stock \$10,000, incorporated by C. T. Walker, J. T. Chelf and J. V. Spear.

Okla., Cushing.—Cushing Oil Development Co., capital stock \$50,000, incorporated by H. W. Steer, J. C. Kerr and G. W. Schlegel of Chandler, Okla.

Okla., Guthrie.—Wells.—Guthrie-Cushing Oil & Gas Co., capital stock \$10,000, incorporated by John M. McDonald, J. E. Pickard and H. M. Adams.

Okla., Oklahoma City.—Wells.—Few Acres Oil & Gas Co. (recently noted incorporated with \$35,000 capital stock), R. J. Bell, secretary-treasurer, 204 Westfall Bldg., opens bids March 1 for drilling wells and installing equipment; about 25 miles of pipe line; 5000 barrels per 24 hours capacity; J. J. Hotelling, engineer in charge, Oklahoma City. (See "Machinery Wanted.")

Okla., Oklahoma City.—Wells.—Oklahoma County Oil & Gas Co., capital \$10,000, incorporated by A. C. Alexander, R. Q. Blakeney and G. E. Klein.

Okla., Sand Springs.—Oil Refinery.—Phoenix Refining Co., J. K. Duffy, president, main office, Tulsa, Okla., advises from New York office at 315 Madison Ave., as follows: Contracts for various units of refinery, to have 2000-barrel daily capacity, let to Warren City Tank & Boiler Co., Kaw Boiler Works, United Iron Works Co. and Tulsa (Okla.) Sheet Iron & Boiler Co.; contract for machine-tool equipment let to Manning, Maxwell & Moore, New York; foundations now being laid for office, machine shop, boiler, pump and receiving houses; plant to be completed about June 1; R. H. Childs, Kansas City, Mo., supervising engineer. (Previously noted under "Miscellaneous Plants.")

Okla., Tulsa.—Vana Oil Co., capital \$8000, incorporated by C. D. Jenal, J. W. Calkins, George W. Rose, O. H. Leonard and others.

Okla., Tulsa.—Wells.—Muskogee Creek Oil Co., capital \$10,000, incorporated by R. W. Kellough, D. C. Acosta and C. R. Thurstwell.

Okla., Tulsa.—Ricard Oil Co., capital stock \$10,000, incorporated by J. B. Levy, J. A. Bearman and L. T. Tryon, all of Broken Arrow, Okla.

Okla., Tulsa.—Wells.—Oceania Oil Co., capital stock \$50,000, incorporated by James E. Dunn of Tulsa, H. G. Beard of Sapulpa, Okla.; James R. Thomas of Oklahoma City, Okla., and others.

Okla., Tillman County.—Wells.—North Fork Oil Co., capital stock \$100,000, incorporated by W. A. Calhoun and John H. Mounts of Frederick, Okla.; E. J. Wattermire and W. H. Hussey of Davidson, Okla.

Tex., Amarillo.—Canadian Oil & Gas Co., capital stock \$50,000, incorporated; H. E. Hume, president; L. A. Wells, vice-president; L. O. Thompson, secretary-treasurer.

Tex., Corsicana.—Corsicana Petroleum Co. advises that recently-noted increase of capital stock from \$300,000 to \$1,500,000 was for general business purposes.

Tex., Ennis.—Gas Plant.—F. A. Price of Taylor, Tex., will build gas plant.

West Virginia.—Wells.—Southeastern Oil & Gas Co., capital stock \$250,000, incorporated by W. C. Foster of Pittsburgh, Pa.; S. C. Cameron of Columbus, O.; C. E. Deffenbaugh of Glenford, O., and others.

W. Va., Shinnston.—Wells.—Shinnston Oil & Gas Co., capital stock \$15,000, incorporated by Harry H. Carder, John F. Martin, D. E. Bock and others.

W. Va., Shinnston.—Wells.—West Side Oil & Gas Co., capital \$20,000, incorporated by I. I. Weaver, Luther C. Swiger and F. W. Sturm of Shinnston, and I. McIntire of Worthington, W. Va.

W. Va., Shinnston.—Wells.—Gusher Oil & Gas Co., capital \$15,000, incorporated by H. P. Boone, Frank Abenzins, H. H. Carder and W. M. Burdett.

ICE AND COLD-STORAGE PLANTS

Fla., Fellsmere.—Fellsmere Electric Light & Ice Co., capital stock \$25,000, incorporated by G. W. Boynton of Caribou, Me., and associates; will build ice and electric-light plants.

Fla., Fort Meade.—Hull & Devane purchased ice plant formerly operated by Alexander Perry; contemplate enlarging.

Md., Mount Airy.—Mount Airy Ice, Laundry & Electric Co., capital stock \$12,000, organized by George W. Runkles and Emory Wagner; will build ice, laundry and electric-light plants; daily capacity of ice plant, 10 tons. (Recently noted.)

Md., Mt. Airy.—Runkles & Wagner have purchased machinery for 10-ton ice plant. (Recently noted as promoting establishment of ice plant, etc.)

Mo., St. Louis.—Polar Wave Ice Co. will build branch plant in western section of city.

N. C., Salisbury.—Establishment of cold-storage plant is contemplated; Jas. H. Warburton, secretary Salisbury Industrial Club,

interested. (See "Canning and Packing Plants" and "Machinery Wanted.")

N. C., Wilmington.—E. Warren & Son have plans by H. E. Bonitz of Wilmington for various improvements at ice-cream factory; install ice plant and provide refrigeration and cold-storage rooms for milk and cream and ice-cream; has lower floor of Straits Bldg. and will make interior improvements, including marble wainscoting, white cement floor, etc.; erect addition in rear; drill artesian well to furnish water for ice; Mr. Bonitz is in charge. (Recently noted under "Miscellaneous Plants.")

Okla., Comanche.—Comanche Ice & Fuel Co., capital stock \$25,000, incorporated by C. A. Struve, A. L. Davis and others.

S. C., Columbia.—Knickerbocker Cold Storage Co. completed organization with John J. Calu president, G. A. Collet vice-president-general manager, E. L. Reeves secretary, and J. W. Lillard treasurer; awarded contract to John J. Cain Construction Co. of Columbia to build cold-storage plant costing \$25,000; incorporators plan organizing Independent Ice & Fuel Co. with \$75,000 capital stock, to establish ice plant with daily capacity 50 tons. (Recently mentioned.)

S. C., Cheraw.—Cheraw Ice Co., capital stock \$25,000, incorporated by J. W. Watson, R. T. Caston and Germain Nova.

S. C., Hartsville.—Hartsville Ice Co., capital stock \$25,000, incorporated by C. W. Coker, M. O. McKennon and Germain Nova.

S. C., Spartanburg.—Independent Ice & Coal Co., capital stock \$30,000, incorporated by S. M. MacKendree, H. C. Moshell and C. C. Wyche; will establish ice plant to have daily capacity of about 25 tons; machinery ordered.

S. C., Spartanburg.—Carolina Public Service Corporation, C. S. Campbell, general manager, Columbia, S. C., will purchase Hygela Ice & Fuel Co.'s plant. (Lately noted under Charleston and other cities.)

Tenn., Memphis.—George H. Guthrie will erect cold-storage plant, 50x50 feet, for Bohlen-Huse Ice Co.; cost \$2000.

Tex., Dallas.—Oak Lawn Ice & Fuel Co. organized with R. J. Torrance, president; J. E. Cockrell, secretary; cost of building (about completed) \$15,000; cost of machinery (purchased) \$10,000. (Recently noted incorporated with \$50,000 capital stock.)

Tex., Midland.—T. O. Rowland of Rotan, Tex., will establish 12-ton ice plant; machinery purchased.

Tex., Port Arthur.—James Summerhill of New Orleans, La., will establish 20-ton ice plant; remove equipment from New Orleans.

Tex., Port Arthur.—Port Arthur Ice & Refrigerating Co. will, it is reported, enlarge plant, expending \$25,000. (Recently reported incorporated with \$100,000 capital stock by Walter N. Munroe of Beaumont, Tex., and others.)

Va., Petersburg.—J. B. Worth Company, J. B. Worth, general manager, awarded contract to Harrison Construction Co. of Petersburg to erect absorption ice plant; two buildings—ice plant proper and offices, 120x35 feet, and boiler and power-house, 40x40 feet; both to be one story, brick construction, with slate and metal roofs; cement floors; ice storage room, 30x36 feet; tanks, 28x60 feet; condensers and coolers, 21x24 feet; 12-foot shed alongside boiler-house for storage; reinforced-concrete condensing towers; daily capacity, 25 tons; contract for machinery awarded. (Recently noted.)

W. Va., Keyser.—William B. Woolf and associates will, it is reported, organize company to build ice plant.

IRON AND STEEL PLANTS

W. Va., Wheeling.—Iron Furnace, etc.—H. D. Westfall, secretary, LaBelle Iron Works, general offices, Steubenville, O., advises that improvements now under way include following: 50-ton open-hearth furnace; 1000 horse-power addition to boiler plant; feed-water heating and treating plant; three turbine-driven centrifugal feed pumps; scrap-bundling machine and plant; various cranes and crane runways; other incidentals; expenditure totaling about \$225,000. (Previously noted.)

LAND DEVELOPMENTS

Ala., Birmingham.—Southeastern Corporation, capital stock \$5000, incorporated; J. W. McKee, president; J. W. Anderson, vice-president-treasurer; E. B. Daffin, secretary.

Ala., Eleanora.—Iowa-Alabama Farm Lands Co., capital stock \$15,000, incorporated by L. J. Power and others.

Ala., Empire.—North Jefferson Orchard & Canning Co. (recently noted incorporated),

O. H. Rowe, president, will develop 40 acres in peach, apple and pear trees; install small cannery; A. A. York, secretary. (See "Canning and Packing Plants.")

Ala., Martin's Station.—Professor Chamberlain of Waterloo, Ia., will purchase 4000 acres in Dallas county from E. B. Martin; reported purchase price, \$100,000; stated that land will be divided into small farms and colonized by Western farmers.

Ala., Marion.—G. E. Newman of Mobile, Ala., purchased for Wisconsin syndicate 4000 acres land in Perry county for \$107,000.

Ark., Arkansas City.—J. N. Axt, local sales manager Foster Realty Co., Detroit, Mich., states his company is not connected with purchase (recently noted) of De Soto plantation, comprising 6000 acres; detailed information not available at present; deal involves about \$500,000 expenditure; probably need some machinery later.

D. C., Washington.—G. L. Rettaliata, 202 Law Bldg., Baltimore, Md.; G. A. Flink of Harrisburg, Pa., and J. C. Dulaney of New York will organize company to develop 150 acres land fronting 250 feet on Potomac River between Washington and Mount Vernon; will divide tract into lots of about half acre and develop as suburb.

Fla., Sarasota.—Sarasota Improvement Co., capital stock \$50,000, incorporated by John P. Cann, Jonathan H. Brown and J. Milton Klenle, all of Wilmington, Del.

Ga., Savannah.—Vale Royal Realty Co., capital stock \$20,000, incorporated by I. E. Richard, Thomas E. Youmans and E. K. Dremmond.

Ky., Louisville.—Southwestern Development Co., capital stock \$50,000, incorporated by E. M. Dugan, P. M. Clarke and H. C. Tiedemann.

La., New Orleans.—Posey Land Co., capital stock \$100,000, incorporated; Mathilde Cook Posey, president; John Dymond, Jr., vice-president; E. Lloyd Posey, Jr., secretary-treasurer.

La., Shreveport.—City will vote February 4 on \$50,000 bond issue to purchase Schumpert homestead as additional portion of State Fair Grounds and for other improvements at Fair Grounds. Address The Mayor.

Md., Baltimore.—Walnut Springs Land Co., capital stock \$1000, incorporated by William L. Rawls (of Marbury, Gosnell & Williams, 700-705 Maryland Trust Bldg.), Frank R. Kent and others.

Mo., Kansas City.—Evanston Park Realty Co., capital stock \$25,000, incorporated by William T. Law, John S. Harley and Frank Paxton.

N. C., Durham.—C. C. Gurley, John M. Lipscomb, J. R. Weatherspoon and Alphonus Cobb purchased suburban property and will develop as residential section; will divide tract into about 200 building lots, construct streets, etc.

N. C., Wallace.—Lake Shore Realty Co., capital stock \$100,000, incorporated by G. W. Hutaft, Z. E. Carter, W. B. Brice and others.

S. C., Greenville.—Piney Mountain Land Co., capital \$15,000, incorporated by T. F. Herbert and C. S. Allen.

Tenn., Nashville.—Thomas H. Matters, Omaha National Bank Bldg., Omaha, Neb., contemplates purchase of 70,000 acres Tennessee land and development by colonization; writes to Manufacturers Record he is not now prepared to state details.

Tex., Bailey County.—I. C. Enoch, Jackson, Miss., purchased 53,420 acres land at reported cost of \$700,000.

Va., Strasburg.—Borum Orchard Co. incorporated with F. M. Lea president and W. S. Wright secretary.

LUMBER MANUFACTURING

Ala., Anniston.—Anniston Lumber Manufacturing Co., capital stock \$5000, incorporated by Alonzo Dishman and others.

Ala., Bellwood.—T. A. Cumble contemplates developing timber land; expects to manufacture 50,000,000 to 75,000,000 slack barrel staves.

Ark., Hoxie.—Sharum-Benningsfield Lumber Co. organized with \$25,000 capital stock; is erecting lumber sheds and office building.

Ala., Mobile.—De La Miyar-Luce Lumber Co., capital stock \$20,000, incorporated with Y. De La Miyar, president; G. M. Luce, vice-president; J. H. Luce, secretary-treasurer.

Ark., Ashley County.—Cramer Land Co. of St. Louis, Mo., purchased 2100 acres hardwood timber land.

Ark., Mulberry.—Mulberry Lumber Co., capital stock \$6000, incorporated by M. T. Dyke, T. L. Jackson, W. B. Hoyle and Nathaniel Dyke, Jr.

Ark., Pine Bluff.—McGehee-Smith Lumber Co. doubled capital stock and purchased

25,000,000 feet yellow pine stumpage in Jefferson and Grant counties; expects to cut 40,000 feet timber daily.

Ark., Pine Bluff.—Long Bell Lumber Co. will build hardwood mill.

Ark., Warren.—Texas Hardwood Lumber Co., capital stock \$75,000, incorporated; Samuel Beck, president-treasurer; Sim B. Enstler, vice-president-secretary.

Fla., Kissimmee.—South Florida Lumber Co. has absorbed Osceola Lumber Co. and Woodall Cypress Co.; Arthur E. Donegan, president; W. A. Smith, secretary-treasurer.

Fla., Okahumpka.—O. C. Jeffcoat of Sailer, S. C., and W. A. Jeffcoat of Ocala, Fla., will build sawmill; develop 5000 acres timber land.

Kentucky.—C. L. Ritter Lumber Co., Huntington, W. Va. (recently noted as purchasing property), advises that Turkey Foot Lumber Co., in which C. L. Ritter is interested, was purchaser of timber properties in Kentucky which will probably be developed this year.

La., Couchville (not a postoffice).—J. M. Bridges Lumber Co. of Sojus (postoffice at Pleasant Hill), La., reorganized, and will establish plant at Couchville, in Minden parish; will develop timber tract; enlarge mill.

La., Baskin.—John W. Kesterson sold 22,000 acres hardwood timber land to Eastern capitalists, who will cut timber and manufacture lumber.

Md., Cumberland.—South Cumberland Planing Mill Co. incorporated; will continue South Cumberland Planing Mill; Louis Weber, president; Albert Z. Weber, vice-president; Arthur J. Weber, secretary-treasurer.

Miss., Bay Springs.—Bay Springs Lumber Co., capital stock \$20,000, incorporated by L. L. Denson, A. J. Dempsey and others.

Mo., St. Louis.—Compton Planing Mill Co., capital \$10,000, incorporated by Carl Schultz, Charles Schlueter and Caroline Schultz.

Mo., St. Louis.—Steinke Manufacturing Co. will build planing-mill to which present equipment will be removed; also install additional machinery.

N. C., Asheville.—Williams & Fulghum Lumber Co., capital stock \$15,000, incorporated by James M. Williams, J. M. English and J. E. Fulghum.

N. C., Hillsboro.—J. A. Davidson purchased 570 acres timber land in Orange county near Hillsboro; will build sawmills and develop.

N. C., Biltmore.—Williams-Brownell Planing Mill Co. increased capital stock from \$25,000 to \$50,000.

Va., Denbigh.—Joseph Hoopes contemplates development of dogwood and beech timber. (See "Machinery Wanted.")

Va., Grundy.—Levisa Land & Timber Co., capital stock \$50,000, incorporated; E. R. Boyd, president; E. H. Witten, vice-president; John W. Flannagan, Jr., secretary-treasurer.

Va., Lynchburg.—Williams & McKeithan Lumber Co., Ernest Williams, president, acquires and will continue various timber developments and lumber manufacturing in Virginia, North Carolina and elsewhere of former Williams & McKeithan Company. (Reported incorporated recently with \$300,000 capital stock.)

Va., Portsmouth.—Portsmouth Planing Mills, capital stock \$25,000, incorporated; Frank C. Lewis, president; H. H. Riddleberger, vice-president; R. H. Riddleberger, secretary-treasurer; daily capacity, one carload of dressed lumber. (See "Machinery Wanted.")

METAL-WORKING PLANTS

Ky., Louisville.—Wire.—Champion Wire & Iron Works, capital \$10,000, incorporated by J. H. Shrader, Albert T. Kochenrath and J. Shrader.

La., New Orleans.—Cans.—New Orleans Can Co., capital stock \$100,000, incorporated by Albert Sidney White, Edgar A. Fordtran, Adolph J. Munch and Arsene Perrillat.

N. C., Whitney.—Aluminum.—Southern Aluminum Co., Donald I. Campbell, engineer in charge, is reported as to abandon present site and locate hydro-electric plant eight miles further down Yadkin River, there building dam 218 feet high to develop 100,000 horse-power for aluminum manufacture; company wires Manufacturers Record: "Have no statement to make for publication now." (Original plans previously detailed.)

Tex., Fort Worth.—Silos.—Texas Kalamazoo Silo Co. (recently noted incorporated with \$10,000 capital stock by Homer Marvel and others) states plans for plant are in charge of Kalamazoo Tank & Silo Co., Kalamazoo, Mich.; buildings will occupy about three

acres, for building and storing silos and machinery.

MINING

Ala., Attalla.—Iron.—Citico Furnace Co., Chattanooga, Tenn., will operate its mines at Attalla in connection with mines at Citico, near Chattanooga.

Ala., Birmingham.—Sand.—Birmingham Sand Co., capital stock \$6000, incorporated; John London, president; I. C. Beatty, secretary-treasurer; W. H. Beatty, general manager.

Ky., Hopkinsville.—Stone.—Company organized with \$50,000 capital stock by C. F. White, James E. Cox and R. C. White, all of Evansville, Ind.; acquired H. M. Dalton Stone Co.

Ala., Oxmoor.—Iron.—Self-Fluxing Ore & Mining Co. organized with Al C. Garber, president; John W. Sparkman, vice-president; J. R. Pratt, secretary, each of Birmingham, Ala.; proceed with Shades Valley developments recently detailed; 1535 acres iron ore land three miles from Oxmoor; plans ultimate daily output 2000 tons iron. (Recently reported incorporated with \$1,500,000 capital stock, etc.)

D. C., Washington.—Slate.—Delta Slate Corporation, 630 Bond Bldg., will develop 22 acres of slate deposits near Delta, Pa.; James F. Davis, president. (Recently noted incorporated with \$250,000 capital stock.)

Md., Chestertown.—Baker Bend Mining Co. incorporated by Louis K. Stam of Chestertown, J. G. Gray and M. B. Hawkins of Wilmington, Del.

Mo., Joplin.—Zinc.—United Zinc Co. leased 20 acres mining lands; subleased north 10 acres to Joseph Jackson; reserved south 10 acres.

Mo., Joplin.—Lead and Zinc.—Charleston Mining Co., capital stock \$5000, incorporated by T. W. Arnold, N. M. Woodford and E. Gilbert.

Mo., Kansas City.—Lead and Zinc.—Forum Mining Co., capital stock \$3000, incorporated by H. J. Carl, E. P. Chase, T. B. Enoch and others.

Mo., Spring City.—R. F. D. from Joplin.—Lead and Zinc.—Lulu V. Mining Co. will probably erect mill.

Mo., Webb City.—Zinc.—Mary Elizabeth Mining Co. (recently noted incorporated, \$50,000 capital stock) will develop 40 acres; ground zinc; J. A. Clark, president; P. R. Sinclair (Aurora, Mo.), secretary; Geo. A. Smith, manager.

Okla., Peoria.—Lead and Zinc.—Bash & Austin of Joplin, Mo., purchased old Syndicate mine and will develop; repairing buildings and machinery.

Okla., Tulsa.—Osage Drilling & Development Co., capital \$100,000, incorporated by D. C. Acosta, E. W. Killough and C. R. Thurstwell.

S. C., Spartanburg.—Gold.—North Pacolet Gold Mining Co. organized with L. Riebling, president, to develop gold mines in Spartanburg county.

Tenn., Centerville.—Phosphate.—James Johnson and Lawrence Arnold will develop phosphate mine on property of Jesse H. Patterson near Centerville.

Tenn., Cumberland Gap.—Limestone.—Col. Hornick will develop limestone quarries.

Tenn., Newport.—Onyx.—J. A. Susong and Walter McCate contemplate development of onyx; company is being planned.

Tex., West Point.—Fuller's Earth.—J. C. Melcher, O'Quinn, Tex., R. F. D. La Grange, Tex., advises of contemplated development of fuller's earth on San Antonio & Aransas Pass Railroad at West Point by B. Grovermann & Co., Bremen, Germany; latter to have American associate.

MISCELLANEOUS CONSTRUCTION

Fla., Pensacola.—Wharves.—City voted \$400,000 bond issue, of which \$300,000 will be expended for municipal wharves and \$100,000 for belt railroad to connect all present docks and extend to Goulding; John A. Merritt, chairman bond trustees. (Recently noted.)

Fla., St. Petersburg.—Pier.—City will construct pier or roadway from sand fill and breakwater on Second Ave., North, eastward into Tampa Bay; bids received until January 23; W. F. Divine, City Clerk. (See "Machinery Wanted.")

La., New Orleans.—Wharf.—Board of Commissioners of Port of New Orleans, William A. Kernaghan, president, 200 New Orleans Court Bldg., receives bids until January 22 to construct (recently noted) Pauline St. wharf, materials for which will be furnished by board; A. C. Bell, engineer. (See "Machinery Wanted.")

La., Plaquemine.—Levee.—Linnane & Bro. have contract to construct levee in front of town; west line of levee to extend 70 feet from Seminary St.

Miss., Clarksdale.—Levee.—Levee Board receives bids until 2:30 January 17 for enlargement of levee sections 69, 70 and 71; about 355,000 cubic yards; also sections 13H to 15H; about 850,000 cubic yards; T. C. Dabney, chief engineer. (See "Machinery Wanted.")

Tenn., Sparta.—Tennessee, Kentucky & Northern Railroad Co., Geo. A. Clark, president, will erect short tunnel. (See "Bridges, Culverts, Viaducts.")

Tex., Galveston.—Dyke.—Government awarded contract to Isaac Heffron of Galveston at \$9427.50 to construct brush and pile dyke from Federal Quarantine Station in Galveston Harbor to junction of Texas City and Galveston channels; requires 37,000 linear feet piling, 250 cords brush and 2252 linear feet 1x6 lumber; C. S. Riche, Lieut.-Col., Engrs. (Call for bids lately noted.)

Va., Norfolk.—Steamship Terminal.—Norfolk & Washington Steamboat Co., Daniel J. Callahan, general manager, foot of 7th St. S. W., Washington, D. C., awarded contract to Sanford & Brooks Company, Commerce and Water Sts., Baltimore, for construction of terminal, consisting of piers, docks and warehouse, and fitted with waiting-rooms and offices; two piers 100 feet wide; docks between 225 feet long by 165 feet wide; bulkhead of creosoted material; warehouse 50x250 feet; lights, water, heat, sewers, paved roadway and sidewalks; no machinery; Gwathmey Engineering Co., Norfolk, prepared plans; previously noted. (See "Warehouses.")

MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Engineering.—Kaiser-Geismar Engineering Co., capital stock \$5000, incorporated; P. B. Kaiser, president-treasurer; H. S. Geismar, vice-president-secretary.

Ala., Prattville.—Contracting.—Nixon-Smith Construction Co., capital stock \$15,000, incorporated by J. E. Nixon, McQueen Smith and W. Howard Smith to engage principally in road construction.

Ark., Hope.—Hardware.—Hempstead Hardware Co., capital stock \$20,000, incorporated by W. G. McKean, G. R. Sissel, C. S. Lowthrop and C. M. Pifer.

Ark., McGehee.—Laundry.—White Swan Laundry Co. awarded contract to build steam laundry; private electric plant; cost about \$8000.

Ark., Pine Bluff.—Grain Elevator.—Westbrook Grain & Commission Co. will build grain elevator and warehouse; contract will soon be awarded.

Ark., Russellville.—Plumbing, etc.—Russellville Plumbing, Electrical & Tinning Co., capital stock \$10,000, organized with W. J. White, president; J. M. Ball vice-president, John W. White treasurer, A. D. Shinn manager, Lewis T. Hagsdale secretary; will succeed Vance & Daugherty.

D. C., Washington.—Dairy.—White Cross Milk Co., capital stock \$500,000, incorporated; J. Selwyn Tait, president, 2016 O St. N. W.; H. E. Burton, secretary.

Fla., Greenwood.—Co-operative Farmers' Breeding & Live Stock Co. incorporated with \$500,000 capital stock by Flake Chambliss of Greenwood, R. H. Folmer, L. G. Biggers, both of Dothan, Ala., and Joseph T. Monier of Birmingham, Ala.

Fla., Jacksonville.—Laundry.—Home Steam Laundry, W. H. Hoskins, proprietor, 313 E. 1st St., opened proposals January 1 on rebuilding of structure recently noted burned; 40x24-foot fireproof building; cost \$5000; plans by S. J. Dickerson, 313 E. 1st St.

Ga., Columbus.—Contracting.—Levy-Morton Company, capital stock \$10,000, incorporated by Marshall Morton, H. W. Morton, W. G. Morton and others.

Ga., Dahlonega.—Transportation.—Dahlonega & Gainesville Transportation Co., capital stock \$100,000, incorporated by G. R. Glenn, G. H. Moore, F. M. Meaders and others; operate automobile road from Dahlonega to Gainesville, Ga.

Ga., Savannah.—Contracting.—Citizens' Construction Co., capital stock \$5000, incorporated by S. K. Platshek and Olaf Otto.

Ky., Lexington.—Grain Elevator.—Blue Grass Commission Co., Rose St. and Chesapeake & Ohio Railway, awarded contract to Burrell Engineering & Construction Co. of Chicago, Ill., to erect grain elevator, operated by electricity; automatic weighing and grain-handling equipment; building to be steel-clad; height 73 feet; total storage capacity, including present facilities, 60,000 bushels.

Ky., Louisville.—Mill Machinery.—L. R. Veatch & Co., capital stock \$20,000, incorporated by L. R. Veatch, W. Q. Rector and John E. Yenner.

Ky., Maysville.—Tie Creosoting.—W. F. Goltra Tie Co., L. C. Mambourg, vice-president, Cleveland, O., contemplates, it is reported, establishing the creosoting plant.

Md., Baltimore.—Iron and Metal.—Pearl Iron & Metal Co., incorporated by Thomas W. Lydon (1933 Edmondson Ave.), Andrew T. Connolly, Robert M. Ways and others.

Md., Baltimore.—Patents.—Pneumatic Concreting Co., capital stock \$10,000, incorporated by Ernest Tucker (treasurer Canton Railroad Co., 24 Commerce St.), L. Hay Eichelberger and others.

Md., Baltimore.—Printing.—Sun Book & Job Printing Office, capital stock \$100,000, incorporated by Joseph W. Magers, Fletcher B. Speed and Edwin T. Dickerson; continue established plant at Baltimore and Charles Sts.

Md., Chesapeake City.—Barge Works.—Southern Transportation Co., 1114-1115 American Bldg., Baltimore, Md., contemplates purchase and enlargement of Henry Diebert Barge Building Co. near Chesapeake City.

Md., Mount Airy.—Laundry.—Mount Airy Ice, Laundry & Electric Co., capital stock \$12,000, organized by George W. Runkles and Emory Wagner; will build laundry, ice and electric-light plants. (Recently mentioned.)

Miss., Meadville.—Publishing.—Advocate Publishing Co., capital stock \$3000, incorporated by D. Q. Giffing, J. P. and P. H. Gaugh.

Mo., Kirksville.—Publishing.—Adair, Macon & Shelby Publishing Co., capital \$30,000, incorporated by H. J. Simmons, R. E. Gooding, John T. Barker and H. M. Still; will control La Plata Home Press, Democrat Publishing Co. of Kirksville and Clarence Courier.

Mo., St. Louis.—Contracting.—James Stewart & Co., capital stock \$3,750,000, incorporated by Alexander M. Stewart, James C. Stewart, William A. Rowan, Charles F. Franson and others; continue established business; offices in St. Louis and other cities.

N. C., Charlotte.—Machinery and Supplies. Manufacturers' Supply Co., capital stock \$25,000, applied for incorporation; general machinery, boiler, engine and supply business; incorporators, John C. Rankin and S. M. Robinson of Lowell, N. C., and Dr. R. W. Petrie, J. P. Lindsey, J. L. Jones and B. F. Rawling of Charlotte.

N. C., Rocky Mount.—Publishing.—Rocky Mount Transcript Co., capital stock \$1000, incorporated by R. H. Conger, F. E. Winslow and J. A. Greene, Jr.

Okla., Enid.—Printing.—Interstate Printing Co., capital stock \$15,000, incorporated; W. I. Drummond, president; S. D. Patrick, vice-president; W. E. Drummond, secretary-treasurer; has building and machinery.

Okla., Gage.—Grain Elevator.—Farmers' Grain & Supply Co., C. T. James, manager, opens bids January 10 to erect grain elevator; mill construction; 20,000 bushels capacity. (See "Machinery Wanted.")

Tenn., Chattanooga.—Publishing.—Chattanooga News Co. will install additional machinery, including typesetting machine for composing-room and automatic plate shaver and trimmer for stereotyping department; equipment purchased.

Tenn., Chattanooga.—Grain Elevator.—Mountain City Mill Co. will build grain elevator to cost \$75,000; capacity 250,000 bushels; plans by Baxter Engineering Co., Buffalo, Tenn.; contractor, Witherspoon-Englas Company of Chicago, Ill.

Tex., Bay City.—Mud and Shell.—Matagorda Mud & Shell Co. incorporated by George T. Sargent and W. E. McNabb of Matagorda and J. C. Lewis of Markham, Tex.; will sell shell for railroad ballast and road construction.

Tex., Beaumont.—Abattoir.—Emmett A. Fletcher, Mayor, will erect brick and concrete abattoir on Gulf & Interstate Railway, about two miles from city; bids received until 10 A. M. February 4 by J. G. Sutton, City Secretary; proposals for machinery and equipment received until same time; previously noted. (See "Machinery Wanted.")

Tex., Houston.—Publishing.—Houston Free Telegram Publishing Co., 1109 Capitol Ave., will conduct publishing business; machinery purchased; J. F. Wolters, president, Chronicle Bldg.; J. R. Montgomery, vice-president and treasurer. (Recently noted incorporated with \$15,000 capital stock.)

Tex., Houston.—Amusement Park.—Bretnling Construction Co. contemplates building amusement park on Fannin St.; amusements will include children's farm, zoological park,

skating and dancing pavilions, German village, miniature railway and other attractions; cost \$50,000.

Tex., San Antonio.—Publishing.—Railroad World Publishing Co., capital stock \$15,000, incorporated by J. M. McLeese, W. H. Pearce and C. L. Flasing.

Tex., San Antonio.—Printing.—Commercial Printing Co., capital stock \$3000, incorporated by W. B. Arnold, E. W. Uhl and Alexander J. Uhl.

Tex., Temple.—Dairy.—Donnell Creamery Co. voted to increase capital stock from \$3000 to \$25,000; purchased 227-acre dairy farm; will erect buildings, install machinery, etc.

Va., Albemarle.—Dry Prizing.—Brunswick Union Dry Prizing Co., R. Lee Chambliss, president, Rawlings, Va., opens bids April 1 to erect buildings and install machinery; size of buildings, 150x40x10 feet and 100x40x20 feet; ordinary construction; cost \$12,000; cost of machinery not determined; proposals may be addressed to Mr. Chambliss at Rawlings. (Recently noted incorporated with \$50,000 capital stock.)

Va., Norfolk.—Steamboat Company.—Tide-water Steamboat Co., capital stock \$5000, incorporated; B. F. McHorney, president and manager, Norfolk; A. J. Ackiss, vice-president, and W. P. Ashburn, secretary-treasurer, both of Virginia Beach, Va.; will operate steamboat on James River between Norfolk and Petersburg, Va.

Va., Richmond.—Mineral Springs.—Fonticello Mineral Springs, capital stock \$200,000, incorporated; John Garland Pollard, president; Dr. J. C. Walton, vice-president; R. M. Kent, secretary-treasurer.

W. Va., Wheeling.—Dairy.—Farmers & Consumers' Dairy Co. awarded contract to John Glecy to erect brick building; cost of machinery, \$5000 to \$8000; Louis Dimmey, president; Hervey Chambers, vice-president; J. A. Chambers, treasurer. (Recently noted incorporated with \$10,000 capital stock.)

MISCELLANEOUS FACTORIES

Ala., Birmingham.—Bags.—Wertheimer Bag Co., capital stock \$5000, incorporated; Leonard Wertheimer, president; Max Stern, vice-president; Victor Wertheimer, secretary.

Ala., Gadsden.—Overalls, etc.—North Alabama Manufacturing Co., organized with \$10,000 capital stock; E. D. Jordan, president; A. W. Woodliff, vice-president; Ernest Woolley, secretary-treasurer; has taken over Woolley plant at Attalla, Ala., and removed machinery to Gadsden; capacity 60 dozen overalls per week.

Ala., Mobile.—Reduction.—Southern Reduction Co., capital stock \$2000, incorporated; will establish plant to manufacture products from carcasses of dead animals, garbage, etc., to be gathered in Mobile; A. T. Dean, president; J. P. Courtney, secretary-treasurer; Edward Zeller, general manager.

Ark., Fort Smith.—Folding Screens.—Pendell Folding Screen Co., capital stock \$10,000, incorporated; W. L. Russ, president; T. A. Bagley, secretary; W. F. Blocker, treasurer.

Fla., Fellsmore.—Cane Syrup.—H. G. Rhode of Indianapolis, Ind., contemplates building cane-syrup mill.

Fla., Jacksonville.—Cigars.—Martinez Charles Company's cigar factory will be 30x120 feet; concrete and steel; bids opened January 10; bids opened about January 10 or 15 for machinery; daily capacity, 20,000 cigars; also erect 22 cottages for employees, commissary and clubhouse; office, 710 W. Bay St. (Recently noted.)

Fla., Key West.—Cigars.—Moreda & Co. will establish cigar factory; erect building 230x111 feet; plans being prepared and bids will be asked about February 1.

Ga., Atlanta.—Aeroplanes.—Company is being organized by H. H. Hoover to manufacture aeroplanes; will succeed Hoover-Conrow Aeroplane Co.

Ga., Atlanta.—World Manufacturing Co. incorporated with \$100,000 capital stock by D. H. Hall and M. R. Hale.

Ga., Atlanta.—Mutual Manufacturing Co. chartered, \$10,000 capital stock, by L. H. Glower, J. R. Roseberry and Dr. W. B. Chandler to conduct mail order and manufacturing business.

Ky., Covington.—Creamery.—Hand Mill & Cream Co. changed name to Covington Dairy Co. and increased capital from \$5000 to \$12,000.

Miss., Columbia.—Naval Stores.—Virginia-Carolina Naval Stores Co., capital stock \$10,000, incorporated by W. S. Boone, J. W. Williamson and A. R. Williamson.

La., New Orleans.—Chemical Compound.—Morrill, Lea & Van Wart Co., Ltd., capital

stock \$50,000, incorporated; Jeremiah T. Morrill, president; Donald McGregor Van Wart, vice-president; John B. Lea, secretary-treasurer.

La., Bogalusa.—Turpentine.—Union Naval Stores Co. of New Orleans, La., leased timber land and will build turpentine plant.

La., Shreveport.—Greases.—Caddo Lubricant Co. (recently noted incorporated with \$10,000 capital stock), Erich F. Kuehne, president, 520 First National Bank Bldg., will erect plant; to include warehouse 75x100 feet, compounding building 100x75 feet, and small tower for boiler and engine; galvanized iron; equipment will consist of tanks, compounding kettles, boilers, gas engines and pumps. (See "Machinery Wanted.")

La., Lake Charles.—Alarums.—Funderberg Automatic Alarm Co., capital stock \$10,000, incorporated to manufacture fire and burglar alarm patented by J. H. Funderberg.

Md., Baltimore.—Bedding.—International Bedding Co., 337-339 Guilford Ave., will erect factory on Guilford Ave.; 120 feet by 85 feet 11 inches; brick and cement; slag roof; steam heat; plans by John Freund, Jr., 508 Hoffman Bldg., 11 E. Lexington St., Baltimore.

Md., Baltimore.—Tobacco.—American Tobacco Co., Charles and Barre Sts., is having plans prepared by Theodore Wells Pietsch, American Bldg., Baltimore, for factory and warehouse at foot of Luzerne St.; five or six stories; about 398x265 feet; brick and steel; concrete foundation.

Md., Baltimore.—Macaroni.—Trinacria Macaroni Manufacturing Co., 12 N. Pine St., leased bakery at 406 N. Paca St.

Mo., Kansas City.—Trunks.—Crawford & Nuss Trunk Co. increased capital stock from \$22,000 to \$35,000.

Mo., St. Louis.—Charles Lecoutour, 4515-19 Shaw Ave., will build one-story factory; cost \$10,000.

Mo., St. Louis.—Shoe Polish.—Herriott Shoe Polish Co. incorporated by R. M. Herriott, D. W. Herriott and James Clausen; capital stock \$50,000.

Mo., St. Louis.—Rugs, etc.—Renard Linoleum & Rug Co., incorporated by Wallace Renard, Edward G. Platt and Louis Renard; capital stock \$250,000.

Mo., St. Louis.—Coal Briquettes.—Briquette Coal Manufacturing Co., capital stock \$100,000, incorporated by J. Carlton O'Neal, D. E. O'Neal and Virgil Turpin.

Mo., St. Louis.—Clothing.—H. Toder Garment Co., capital \$15,000, incorporated by Jacob Schiffman, Ida Toder and Harry Toder.

Mo., St. Louis.—Blaugas.—Mississippi Valley Blaugas Co., capital stock \$2,000,000, incorporated by Theodore Gary of Macon, Mo.; E. D. Nims and W. P. Hemphill of Kansas City, Mo., and others; branch of Blaugas Company of America.

Mo., St. Louis.—Medicine.—Edgar Roberts Manufacturing Co. purchased site 25x114 feet adjoining present building at 210 Walnut St.; will erect three-story factory building and erect additional story to present two-story building.

Mo., St. Louis.—Clothing.—Starr-Brill-Stelner Garment Co., capital stock \$30,000, incorporated by S. S. Brill, H. V. Steiner and H. A. Steiner.

Mo., St. Louis.—Aeroplanes.—Huber Safety Aviation Manufacturing Co. incorporated to manufacture aeroplane invented by Robert F. Huber, 508 N. 20th St.; will locate factory at 712 Olive-street Rd.

N. C., High Point.—Mirrors.—Southern Mirror Co., capital stock \$125,000, incorporated by Frank Wineskie, E. G. Wineskie, C. F. Long and M. A. Long.

N. C., Raleigh.—School Supplies.—Southern School Supply Co., capital stock \$50,000, incorporated by Charles E. Johnson, J. W. Bailey, Clarence Poe and others.

N. C., Walkertown.—Tobacco.—N. D. Sullivan Co. (recently reported incorporated) organized with W. N. Poindexter president, C. D. Ogburn vice-president, Sullivan Booe secretary, and Charles Ogburn treasurer; acquired and will continue tobacco factory of N. D. Sullivan; increase capacity.

N. C., Wilson.—Tobacco.—Imperial Tobacco Co. will enlarge and improve plant.

Okla., Tulsa.—Harris-Morse Manufacturing Co., capital \$1000, incorporated by James M. Harris, Frank E. Morse and Ruth Morse.

Okla., Oklahoma City.—Insect Exterminator.—Electric Insect Exterminator Co. will establish plant to manufacture electric screens for killing house and orchard insects; will use former showcase factory and install additional machinery; also contemplates establishing three small factories in Texas. (Recently noted incorporated with

\$20,000 capital stock by James A. Bordenaux and others.)

Okla., Tulsa.—Chemicals.—Hygeia Chemical Co., capital stock \$10,000, incorporated by S. DeZell, G. R. McCullough and William H. Walker.

S. C., Little Mountain.—Drugs.—Little Mountain Drug Co., capital stock \$5000, incorporated by John M. Sease and J. B. Derick.

Tenn., Bristol.—Tanning Extract.—Holston Extract Co. (subsidiary of Charles A. Schieren Company, 30 Ferry St., New York) will rebuild tanning extract plant recently reported burned; estimated loss, \$100,000.

Tenn., Chattanooga.—Shoes.—Fellows Shoe Manufacturing Co., B. L. Brady, secretary-treasurer, is considering establishment of shoe factory.

Tenn., Memphis.—Artificial Limbs.—Tri-State Artificial Limb Co., capital stock \$1000, incorporated; R. B. Humphrey, president and treasurer; R. B. Riebeth, secretary-treasurer; has all necessary equipment.

Tenn., Memphis.—Hoops.—Tennessee Hoop Co. increased capital stock from \$25,000 to \$100,000.

Tenn., Nashville.—Candy.—Bowman Bros. Candy Co., capital stock \$10,000, incorporated by C. A. Bowman, Jr., A. G. Henderson, Robert L. Bowman and others; affiliated with Bowman Bakery & Confectionery Co., in The Arcade.

Tenn., Nashville.—Bakery.—Grocers' Baking Co., capital stock \$20,000, incorporated by L. M. Klein, G. A. Harrison, Linton Hickman and others.

Tex., Corpus Christi.—Gas.—Henderson, Newberger & Loeb of Philadelphia, Pa. (represented by C. R. Bruce), will build gas plant; secured franchise. (City recently noted, under "Miscellaneous Plants," to vote on granting gas franchise to Mr. Bruce.)

Tex., Gainesville.—Mattresses.—W. J. Sheppard of Hubbard City, Tex., will establish mattress factory.

Tex., Houston.—Bags and Paper.—Gulf Bag & Paper Co., capital stock \$50,000, incorporated; will continue established plant.

Texas.—Insect Exterminator.—Electric Insect Exterminator Co., Oklahoma City, Okla., contemplates establishing three small factories in Texas. (See Okla., Oklahoma City.)

Va., Norfolk.—Beds.—Fields' Comfort Bed Co., Citizens' Bank Bldg., capital stock \$50,000, incorporated; J. Edward Cole, president; A. Fields, vice-president; S. C. Harris, secretary.

Va., Richmond.—Tobacco.—Stephano Bros., capital stock \$3,410,000, incorporated with Constantine Stephano of Philadelphia, Pa., president; Stephano Stephano of Philadelphia, vice-president; Arthur S. Friend of New York, secretary. Directors are Constantine Stephano, William M. Crump of Richmond, Henry M. Wise and Arthur S. Friend of New York.

W. Va., Huntington.—Paints, Oils, etc.—Standard Ultramarine Co., capital stock \$100,000, incorporated by Omar T. Frick, Henry Dourif, William K. Shelly, all of Tiffin, O., and others. (Standard Ultramarine Co. of Tiffin, O., recently noted to establish plant to manufacture ultramarine blue pigment, etc.)

W. Va., Wheeling.—Davis Electrical Co., Parkersburg, W. Va., will establish plant.

MOTORS AND GARAGES

D. C., Washington.—Garage.—Adams Express Co., Washington Terminal, 2d and I Sts. N. E., will erect garage on 3d St. N. E., between L and M Sts.; 100x145 feet; fireproof; steel and concrete, with brick, set in Flemish bond on exterior; metal exterior frames; steel rolling doors; reported to accommodate 60 electric trucks; room 12x30 feet for electrical apparatus; also repair and workroom 28x50 feet; plans by Milburn, Heister & Co., Union Savings Bank Bldg., Washington.

Fla., Kissimmee.—Garage, etc.—S. B. Aultman purchased Osceola Garage, containing floor space of over 35,000 square feet; will transfer stock, machine shop, etc., from present building.

Ga., Atlanta.—Trucks, etc.—Van Winkle-Morton Truck Co., \$50,000 capital stock, chartered by A. J. Paxson, Jr., and Edgar Watkins to manufacture motor trucks and passenger motor vehicles.

Ky., Louisville.—Automobiles.—Standard Auto Co., capital stock \$25,000, incorporated by George A. Dunham, Clifford L. Alderson and J. H. Alderson.

Ky., Louisville.—Garage.—J. Wheeler McGee and Armstrong estate will erect garage at 3d and Chestnut Sts.; cost \$75,000.

La., Shreveport.—Garage.—W. K. Ander-

son, Jr., awarded contract to W. H. Werner of Shreveport to erect \$25,000 garage.

Md., Baltimore.—Garage, etc.—William E. Hooper & Sons Company, 55-56 Maryland Life Bldg., will build garage, blacksmith shop and transformer-house on Parkdale Ave.; one story; brick; 76.2x24 feet; contractor, Henry Smith & Sons Company, 111 Hanover St., Baltimore.

Mo., St. Louis.—Garage, etc.—John A. Hutcheson of Walk-Over Shoe Co. has plans by Frederick C. Bonsack of St. Louis for three automobile sales and service buildings; reinforced concrete; fireproof; inside dimensions, 31x105 feet; show-rooms to have marble floors and walls wainscoted eight feet high; each structure to be provided with separate heating plant and elevator; steel window sash; front faced with enamel terra-cotta; skylight in center of second floor; estimated cost, \$40,000; bids being received; Mr. Bonsack to supervise construction; portion of structure to be occupied by General Motor Co. (Recently mentioned.)

Mo., St. Louis.—Ford Motor Co. (main office Detroit, Mich.) will build garage; five stories; about 150x200 feet; ornamental front; show windows; plans by Clymer & Drischler of St. Louis.

N. C., Maxton.—Automobiles.—Maxton Auto Co., capital stock \$50,000, incorporated by A. J. McKimmon, R. M. Williams, Byron McCallum and others.

Tenn., Chattanooga.—Automobiles.—Dayton Motor Car Co., Dayton, O., contemplates establishing plant.

Tex., El Paso.—Garage, etc.—James McKim Company, 418 Texas St., awarded contract to J. C. Worthington, El Paso, to erect addition to building for Two Republics Garage; mill construction; machinery purchased. (Two Republics Garage recently noted to erect addition to building.)

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ark., Argenta.—St. Louis, Iron Mountain & Southern Railway Co., J. R. Stephens, chief engineer, St. Louis, Mo., is constructing recently-noted roundhouse by company's force; work to be completed soon.

Tex., Hearne.—Houston & Texas Central Railroad, W. G. Van Vleck, general manager, Houston, Tex., is having plans prepared to double yard and shop facilities.

Tex., San Antonio.—International & Great Northern Railway, O. H. Crittenden, chief engineer, Houston, Tex., is having plans prepared for roundhouse and machine shops; fireproof; 14 engine stalls; estimated cost \$35,000. (Recently mentioned.)

ROAD AND STREET WORK

Ala., Birmingham.—City will construct certain granite block alley paving under improvement ordinances Nos. 695-C, 696-C, 697-C, 698-C, 700-C, 701-C and 702-C; bids received January 7; Walter G. Kirkpatrick, City Engineer. (See "Machinery Wanted.")

Ala., Mobile.—Board of Revenue and Road Commissioners awarded contract to Jett Bros. Contracting Co. of Mobile to improve two additional miles of Moffat Rd.

Ark., Wynne.—Ed Hamilton, chairman of meeting, appointed committees to arrange for construction of road across Cross county from Woodruff to Crittenden county lines.

D. C., Brookland.—District Commissioners, Washington, D. C., approved recommendations for street improvements costing \$50,000.

Fla., Bradentown.—City will construct 37,000 square yards bituminous flush coat surface, asphaltic concrete or asphalt macadam (poured process) paving; also construct 45,000 linear feet combined curb and gutter; separate bids received for paving and curbing; bids received until January 23; H. S. Jaudon Engineering Co., Box 582, Savannah, Ga., consulting engineer. (See "Machinery Wanted.")

Fla., Live Oak.—Board of Bond Trustees, W. H. Lyle, chairman, receives bids until 4 P. M. February 5 for about 25,000 square yards street paving; consider vitrified brick, granite, sheet asphalt and asphaltic concrete; also drainage and curb; H. S. Jaudon Engineering Co., Box 582, Savannah, Ga., consulting engineer. (See "Machinery Wanted.")

Ga., Macon.—City awarded contract to Southern Paving Construction Co., Chattanooga, Tenn., to resurface College St. from Jones St. to Georgia Ave. with vitrified brick. (Contract recently reported awarded to Alabama Construction Co. of Birmingham, Ala., has been rescinded.)

Ky., Mumfordsville.—Hart county contemplates voting March 4 on \$200,000 bond issue

to build turnpikes and gravel roads. Address County Commissioners.

La., Shreveport.—City votes February 4 on \$300,000 bond issue to resurface number of paved streets, gravel streets leading to parish roads, extend paving system, purchase Cross Lake lands for water reservoir and construct several storm sewers in residential sections. Address The Mayor.

Miss., Jackson.—James B. Lusk, secretary Board of Trade, states bond issue of \$100,000 is contemplated for further extension of roads in surrounding territory.

Miss., Liberty.—Amite county votes January 11 on \$80,000 bond issue for road construction. Address County Commissioners.

Miss., Ocean Springs.—Jackson County Supervisors, Pascagoula, Miss., awarded contract to J. B. Howe and associates of Gulfport, Miss., to construct section of road from Ocean Springs to Vancleave.

Miss., Philadelphia.—District No. 1 of Neshoba county voted \$100,000 bond issue for road construction. Address County Commissioners.

Mo., Maryville.—Polk township of Nodaway county voted \$50,000 bond issue for road and bridge construction. Address County Commissioners. (Recently mentioned.)

N. C., Wilson.—City contemplates voting on \$100,000 bond issue to improve streets and enlarge electric-light plant. Address The Mayor.

Okla., McAlester.—City awarded contract to McEachin & McEachin at \$786.25 for street paving in Second Ward.

S. C., Greenville.—City will pave 11 additional streets; about \$50,000 available. Address The Mayor.

Tenn., Lonsdale, R Station Knoxville.—City is considering \$20,000 bond issue to further improve streets. Address The Mayor.

Tex., Anderson.—Grimes County Commissioners are having plans and specifications prepared for system of macadam roads; \$125,000 bond issue authorized.

Tex., El Paso.—El Paso county voted \$40,000 bond issue to construct macadam, gravel or paved roads in District No. 3 and \$350,000 bond issue to construct macadam, gravel or paved roads in county; Park W. Pitman, County Clerk. (Recently mentioned.)

Tex., Falfurrias.—Brooks county voted \$45,000 bond issue for road construction. Address County Commissioners. (Recently mentioned.)

Tex., Fort Worth.—Tarrant County Commissioners will arrange for immediate construction of four lateral roads: Nine-Mile Bridge Rd., Fort Worth to Crowley Rd.; Mansfield-Webb and Webb-Arlington Rds., and one road in Grapevine District; J. S. Travilla of St. Louis, Mo., will postpone preparation of plans for cardinal and sub-cardinal roads and make surveys for lateral roads. (Mr. Travilla recently noted as being engaged to prepare plans for main roads.)

Tex., Fort Worth.—City will make improvements to North Houston St. from 20th St. to 25th St., Ellis Ave. from 20th to 25th St. and Clinton Ave. from Central Ave. to 20th St. with one of following materials: vitrified brick, Bermudez bituminous concrete or rock asphalt; plans and specifications prepared by City Engineer; bids received on or before January 11; F. J. Von Zuben, Acting City Engineer. (See "Machinery Wanted.")

Tex., Hearne.—Hearne Precinct of Robertson county votes January 21 on bond issue for road construction. Address County Commissioners, Franklin, Tex.

Tex., Houston.—City will construct pavement on Louisiana St. (recently noted) according to specifications adopted by City Council as follows: From intersection with south line of Capitol Ave., creosoted blocks; from intersection with south line of Capitol Ave. to north line of Pease Ave., texaco asphalt pavement, and to intersection of north line of Berry Ave. to intersection with north line of Berry Ave., bitulithic pavement; bids received until January 13; Dan C. Smith, City Secretary; H. B. Rice, Mayor. (See "Machinery Wanted.")

Tex., Houston.—Harrisburg Rd., from Milby St. to eastern city limits, will be paved with five-inch concrete base, covered with naphtha paint coat and Texaco sheet asphalt surface; bids received until 12 noon January 13 at office of Dan C. Smith, Jr., City Secretary; Harris county recently noted having appropriated \$9000. (See "Machinery Wanted.")

Tex., Paris.—City, Ed. H. McCuiston, Mayor, awarded contract to Downward Asphalt Co., Ardmore, Okla., for recently noted paving; cost about \$30,000; about one mile 36-foot street; J. W. Crook, engineer in charge.

Tex., Port Lavaca.—Road District No. 2 of Calhoun county voted \$135,000 bond issue for road construction. Address County Commissioners.

Va., Big Stone Gap.—Richmond Magisterial District of Wise County voted \$130,000 bond issue to place macadam on roads already graded. Address District Commissioners. (Recently noted.)

Tex., Sweetwater.—Nolan county voted \$100,000 bond issue for road construction. Address County Commissioners.

Tex., Waco.—City will vote February 6 on \$100,000 bond issue for street improvements. Address The Mayor.

Va., Marion.—St. Clair district of Marion county voted \$75,000 bond issue for road construction. Address County Commissioners.

Va., Marion.—Marion district of Smyth county voted \$150,000 bond issue to construct roads, including its portion of Bristol-to-Washington highway. Address County Commissioners.

Va., Norton.—Gladeville Magisterial District of Wise County voted \$130,000 bond issue to complete construction of roads already begun. Address District Commissioners. (Recently mentioned.)

W. Va., Warwood.—City will grade and macadamize Main St., about 3100 linear feet; Charles B. Miller, Recorder; bids received until January 10; C. H. Dowler, Mayor. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Decatur.—City, H. A. Skeggs, Mayor, receives bids until 7.30 P. M. January 15 for construction of proposed certain sanitary sewers; plans, etc., at office of City Engineer. (See "Machinery Wanted.")

Ark., Little Rock.—City will construct sewer mains and laterals in blocks 160 and 161 old city; blocks 400, 401, 402, 403, 404, 405, 406, 407 and 408, Lincoln & Zimmerman's addition; block 6, Fulk's addition; also construct sewer mains and laterals in blocks 4, 5 and 6, Deaf Mute section; bids received separately for each work, by Board of Public Affairs, until January 20; Fred A. Isgrig, clerk. (See "Machinery Wanted.")

Ga., Americus.—City votes January 21 on \$10,000 bond issue for sewer construction. Address The Mayor.

Ky., Louisville.—Board of Public Works receives bids until 2 P. M. January 17 for sewer construction, letting No. 478, Contracts 7, 6, 8, 9 and 10; plans and specifications with board; about 10,940 linear feet 36, 33, 30, 27, 24, 20, 18 and 15-inch sewers; 250 vertical feet manholes. (See "Machinery Wanted.")

Ky., Pineville.—City will construct sewer from William Low's down Cedar St.; bids received until January 14; F. A. Heath, Clerk; N. R. Patterson, Mayor. (See "Machinery Wanted.")

La., Shreveport.—City votes February 4 on \$300,000 bonds issue to construct storm sewers in residential districts, etc. Address The Mayor. (See "Road and Street Work.")

Md., Baltimore.—City will construct sanitary lateral sewers in District No. 8, Sanitary Contract No. 107; require 25,000 linear feet vitrified pipe house connections and 39,000 linear feet vitrified pipe sewer, 8 inches to 24 inches in diameter; Board of Awards receives bids until January 22; date of opening bids postponed from December 23; lately noted; Charles England, chairman, Sewerage Commission. (See "Machinery Wanted.")

Miss., Laurel.—City has plans by Charles P. Chase, consulting engineer, Clinton, Ia., for six miles of sanitary sewers; F. H. Bush, Mayor. (City recently noted to issue \$30,000 of bonds.)

Okla., Collinsville.—City will make extension to sewer purification and disposal system; cost \$5000; W. F. Keller, engineer in charge; W. B. Erwin, Mayor.

Okla., Sulphur.—City has \$17,500 appropriated by Congress for constructing sanitary sewer system to cost \$35,000. Address The Mayor. (Bond issue of \$17,500 previously noted voted.)

Tex., Dallas.—City Commissioners approved contract of A. T. Muller at \$200 for construction of 8 and 6-inch sanitary sewers.

Tex., Paris.—City, Ed. H. McCuiston, Mayor, awarded contract to Hunter & Hunter, Oklahoma City, Okla., for sewer construction recently noted; vitrified pipe, various sizes; cost about \$12,000; J. W. Crook, engineer in charge; material purchased, unless probably fitting for flush tanks.

Tex., San Antonio.—City Council appropriated \$500 for surveying sections of city without sewers; engineer will be employed to

make surveys under direction of City Engineer; Address The Mayor.

W. Va., Huntington.—City will construct 12 and 15-inch lateral sewers on 1st, Hagan and Smith Sts., Second Ave. and all alleys; bids received until 1.30 P. M. January 30; A. B. Maupin, City Engineer; L. A. Pollock, Commissioner of Streets, etc. (See "Machinery Wanted.")

TELEPHONE SYSTEMS

Ala., Irvington.—Irvington Telephone & Telegraph Co. (main office, Atlanta, Ga.) will construct double metallic rural telephone system extending 8½ miles across Hoyl Ranch to Estherwood.

Ky., Hubble.—Hubble Telephone Co., capital \$2500, incorporated by F. F. Fitzpatrick, S. H. Weaver, B. W. Guvena and Robert Rankin.

Ky., Louisville.—Lincoln Bank i having tentative plans prepared by Joseph & Joseph of Louisville for building, which will probably be occupied by Western Union Telegraph Co.; main office, 195 Broadway, New York; structure to have glazed brick front; 80x80 feet.

La., Estherwood.—Cumberland Telephone & Telegraph Co. (main office, Atlanta, Ga.) will construct double metallic rural telephone system extending 8½ miles across Hoyl Ranch to Estherwood.

Miss., Fort Bayou.—Fort Bayou Telephone Co., capital stock \$5000, incorporated by R. M. Spaulding and Alfred Lewis of Fort Bayou and S. E. Spencer of Ocean Springs, Miss.

N. C., Ridgeway.—Planters' Telephone Co., capital stock \$25,000, incorporated by A. G. Hayer and others; will construct about 30 miles line; construct exchange to cost \$2500; date of opening bids not set; probable engineer, J. L. P. Horton.

Okla., Oklahoma City.—Riverside Telephone Co. incorporated by John Woolf, F. E. Schuman and B. J. Kolesch.

Okla., Shattuck.—Sunny Slope Farmers' Rural Telephone Co., capital \$1000, incorporated by J. A. Hetzler and John Baker of Gage, Okla., and Ray N. Dunnahoo of Shattuck.

S. C., Cross Keys, R. F. D. from Union.—Cross Keys Telephone Co., capital stock \$1000, incorporated; L. J. Browning, president; B. G. Wilkinson, vice-president; W. H. Wilburn, secretary-treasurer.

TEXTILE MILLS

Ala., Oxford.—Cotton Yarn, etc.—Southern Hills Corporation will add 1000 spinning spindles and 200 twister spindles; cost about \$1000; contracts awarded and installation begun.

Ga., Athens.—Cotton Goods.—Southern Manufacturing Co. advises Manufacturers Record that recent report it will build another mill was incorrect.

Ga., Athens.—Cotton Cloth.—Southern Manufacturing Co. states it will not build additional mill. (Reported recently as considering erection of another mill.)

Ga., Cartersville.—Knit Goods.—Paul Gilreath is interested in plan to establish knitting mill. (See "Machinery Wanted.")

Ga., Villa Rica.—Cotton Yarn.—Villa Rica Cotton Oil Co. is increasing spinning plant from 2500 to 5000 spindles. (Recently reported as to double capacity.)

Ga., Trion.—Cotton Cloth.—J. E. Sirrine, Greenville, S. C., engineer in charge, writes to Manufacturers Record: "Trion Company is equipping hotel, school, store, auditorium and gineries with sprinkler fire protection; installing heating system in hotel, store, school and auditorium; extending and improving village fire protection; improving and modernizing fire protection equipment in some of old mill buildings; installing modern sanitary water-closets in connection with mill." (Trion Company previously wired Manufacturers Record: "Improvements will cost about \$100,000 for village and about \$300,000 for new machinery and repairs to mill.)

Miss., Yazoo City.—Cotton Yarn.—Yazoo Yarn Mill writes to Manufacturers Record: "We do not contemplate any new buildings, but are adding 1500 spindles with necessary card-room machinery, overhauling and increasing steam power plant; have contracted for all; approximate cost of machinery, \$14,000; John Hill, Atlanta, Ga., engineer-architect in charge." (Recently incorrectly reported as to build another mill.)

Mo., St. Louis.—Woolens.—Manchester Woolen Co., capital stock \$10,000, incorporated by Samuel J. Rovics, Gussie Rovics and A. E. Welsh.

N. C., Brevard.—Cotton Yarns.—Floyd Cotton Mills, executive offices at Greenville, S.

C., writes to Manufacturers Record: "Not in position to give out any statement at present relative to enlargement; plans not yet completed." (Recently reported as considering increase of equipment.)

N. C., High Point—Hosiery Yarn.—Highland Cotton Mills, capital stock \$100,000, incorporated by J. H. Mills, J. H. Adams, W. H. Ragan and others; will build 10,000-spindle hosiery yarn mill. (This is 10,000-spindle plant previously reported to be built by High Point Knitting Mills.)

N. C., Hope Mills—Shirting, etc.—Hope Mills writes to Manufacturers Record: "We have made no further plans regarding enlargement of our plant." (Previously reported as increasing capital stock by \$150,000.)

N. C., Lexington—Cotton Cloth.—George W. Montcastle of Lexington, Erlanger Bros. (B. V. D. Company) of New York and associates will organize \$500,000 company (probably Belvidere Mills) to build 25,000-spindle and 700-loom mill; buildings of brick construction; textile machinery contract awarded; engineer-architect in charge, J. E. Shirine of Greenville, S. C.; plans include construction of model mill village, increasing initial equipment to 40,000 spindles and 1000 looms and erection within five years of another mill to have 40,000 spindles, etc. (Lately mentioned.)

Oklahoma City—Cotton Goods.—Western Guaranty & Trust Co. plans organization of company to build cotton mill.

S. C., Abbeville—Cotton Goods.—Abbeville Cotton Mills writes to Manufacturers Record: "We have reached no decision regarding enlargement." (Recently reported as to add 25,000 spindles and accompanying machinery.)

S. C., Blackburg—Cotton Cloth.—Broad River Mills organized with W. C. Hamrick, president; D. C. Ross, secretary; acquired Whitaker Cotton Mill; will thoroughly remodel and install new equipment; latter purchased. (Recently reported incorporated with \$50,000 capital stock.)

S. C., Greenville—Cotton Goods.—Mills Manufacturing Co. contemplates increasing plant; now has 31,000 ring spindles, 816 broad looms, etc.

S. C., Ware Shoals—Cotton Cloth.—Ware Shoals Manufacturing Co. will build small additional mill; construction in progress.

Tenn., Lexington—Cotton Cloth.—Dacotah Cotton Mills writes to Manufacturers Record: "Have purchased 4800 spindles and 150 looms for addition; extension to mill, 70x101 feet, three stories; local contractors." (Previously mentioned as expecting to add 4800 spindles and 200 looms next spring.)

WATER-POWER DEVELOPMENTS

Ala., Wetumpka.—Alabama Interstate Power Co., W. W. Freeman, managing director, Brown-Marx Bldg., Birmingham, Ala., has, as lately reported, plans and specifications for construction of second dam on Coosa River; location: Lock 18, about four miles from Wetumpka; second dam will make river navigable and cost several million dollars; has contract for electricity developed at second dam; plans practically same as for first dam at Lock 12 (excepting extension lines) now under construction. Mr. Freeman wires Manufacturers Record: "Company is committed to developing Lock 18 as promptly as practicable following Federal permits." New York office at 100 Broadway, New York.

Tenn., Sevierville.—Sevierville Light & Power Co., Clyde McMahan, president, will install hydro-electric plant recently noted (under "Electric Plants"); location, 10 miles from Sevierville; cost estimated at \$4000; water-power already installed; will develop about 65 horse-power; now opening bids on electrical equipment; D. R. Shearer, Knoxville, Tenn., in charge of design and installation. (See "Machinery Wanted.")

WATER-WORKS

Ala., Tuscaloosa.—City will extend water mains. Address City Commission. (Commission recently reported as receiving report of Morris Knowles, engineer, Pittsburgh, Pa., recommending various improvements to water-works, including concrete basin and filter, concrete reservoirs, etc.)

Ark., Camden.—J. T. Gaughan, T. J. Watts and Harry Solomon, trustees of Myar estate, purchased local water-works and are having plans prepared for building in which to install equipment of both water and electric-light plants, so that both plants may be operated jointly.

Fla., Alachua.—City has, it is reported, awarded contract to J. B. McCrary Com-

pany, Atlanta, Ga., to construct water and electric-light systems; cost about \$26,000.

Fla., Madison.—City will construct water-works; issue \$5000 bonds. Address The Mayor.

Ky., Letchfield.—W. T. McCaskey Light & Power Co. is having plans prepared for water-works.

La., Shreveport.—City votes February 4 on \$300,000 bond issue to purchase Cross Lake lands for water reservoir, etc. Address The Mayor. (See "Road and Street Work.")

N. C., Durham.—City is considering changing source of water supply. Gilbert C. White, engineer, Charlotte, N. C., is making investigations.

N. C., Goldsboro.—City will build proposed electrical pumping station and filter plant; machinery mainly purchased; engineer, Gilbert C. White, Charlotte, N. C.

Oklahoma City—City will make extensions to water-works and light plant; cost \$20,000; W. F. Keller, engineer in charge; W. B. Erwin, Mayor. (Recently noted as to vote in January on \$10,000 bond issue to extend water-works, light plant, etc.)

Oklahoma City—City contemplates voting on \$80,000 bond issue to construct water-works. Address The Mayor.

S. C., Camden.—City Commissioners awarded contract to Tucker & Laxton of Charlotte, N. C., to construct water-works and electric-light plant; auxiliary and main pump station, steam and electric pumps, 300-horse-power boiler plant, 1,000,000-gallon filter plant, reservoir, generators, complete lighting system, and about 3 miles 10 and 12-inch pipe line; W. J. Dunn, chairman Commissioners of Public Works; engineer, Gilbert C. White, Charlotte, N. C. (Call for bids lately noted.)

Tenn., Puryear.—Puryear Utility Co. will be incorporated; negotiating with Puryear Water & Light Co. for purchase of plant.

Tex., Dallas.—City awarded contract to Lindsay & Smith of Dallas at \$751 to erect superstructure of pumping station in Oak Cliff; J. M. Basset, chief engineer of water-works department.

Tex., Denison.—City is considering \$40,000 bond issue to install filter plant. A. W. Acheson, Mayor.

Tex., Granbury.—J. B. Ross, Mayor, states \$15,000 will be expended on water-works construction. (Recently noted.)

Tex., Gregory.—The Taft Company of Taft, Tex., will construct water-works system for Gregory and Portland, Tex.; lay 12-inch main from Taft to Gregory and Portland, supplying various Taft farms along route with artesian water; estimated cost \$100,000.

Tex., Houston.—Houston & Texas Central Railroad awarded contract to Walsh & Weldner Company, Chattanooga, Tenn., to erect 20x125-foot steel standpipe; capacity 500,000 gallons; cost \$10,000. (Previously incorrectly noted at "Galveston.")

Tex., Malone.—Clayton Rogers purchased interest in Malone Water Co.; will extend water system; installing pumping facilities.

Tex., Portland.—The Taft Company of Taft, Tex., will supply water system for Portland and Gregory, Tex. (See Tex., Gregory.)

Va., Graham.—City will extend water system; J. M. Smith, Mayor.

WOODWORKING PLANTS

Ala., Bellwood.—Staves.—T. A. Cumble contemplates establishing barrel stave plant. (See "Lumber Manufacturing.")

Ala., Gadsden—Shuttles.—Alabama Automatic Threading Shuttle Manufacturing Co. incorporated; will establish plant to manufacture shuttles; W. H. Portner, president. Mr. Portner and W. H. Beard recently noted as having organized company. (See "Machinery Wanted.")

Ala., Mobile—Veneer.—O. H. Kyle Veneer Co., capital stock \$10,000, incorporated; O. H. Kyle, president and manager; A. L. Kridler, secretary-treasurer; both of Mobile; N. G. Harding, vice-president, Chicago, Ill.; company succeeds O. H. Kyle & Co.; manufactures veneers hardwood veneers; daily capacity 50,000.

Miss., Greenville.—Cooperage.—Creston Cooperage Co., capital stock \$750,000, incorporated by John M. Peel, William S. Peel and George E. Whitney, all of Marysville, Ohio.

Tex., Houston—Barrels.—J. N. Hirsch Cooperage Co.'s building will be 50x100 feet; corrugated iron; day labor; cost of machinery (purchased) \$5000; daily capacity, 800 barrels. (Recently noted.)

Va., Norfolk—Cabinets.—Neddo Cabinet Corporation (recently noted incorporated, \$20,000 capital), Richard Neddo, president,

will not erect plant; having cabinets manufactured.

W. Va., Mullens—Furniture.—West Virginia Furniture Co., capital stock \$10,000, incorporated by D. D. Moran of Mullens, A. E. Weaver, R. A. Keller, A. D. Beavers, George P. Stewart, J. M. Glenn and C. A. Keller, all of Pineville, W. Va.

BURNED

Ala., Birmingham.—Residence at 1525 N. 32d St., owned by Mrs. McGin; loss about \$3000.

Ala., Faunsdale.—George Pegram's residence.

Ala., Montgomery.—Cemetery Hill negro school on E. Jefferson St.; loss \$3000. Address City Commission.

Ark., Charleston.—McBarren & Son's stable, Harrington Hotel's sample-rooms; loss \$25,000.

Ark., Hoxie.—Harry Boas' building, loss \$5000; Pat Whalen's building, loss \$4000; Richardson Bros.' hotel building, loss \$3000; T. J. Sharum's hotel, loss \$3000.

Ark., Piggott.—Bruce-Brown Mercantile Co.'s building; Reeves Pharmacy; J. C. Barker's store; loss \$75,000 to \$100,000.

Ark., Warren.—Gay Oil Co.'s plant; loss \$2000.

Ga., Griffin.—A. L. Neely's store on W. Taylor St.; McNeely & Lindsey's store; Mrs. Joe Elrod's store; Kleanwell Pressing Club's building.

Ga., Waycross.—Dr. J. H. Redding's residence; loss \$4000 to \$5000.

Ga., Waycross.—C. W. Young Company's cabinet and buggy plant; loss \$5000.

Ga., Waynesboro.—Two buildings owned by J. H. Whitehead and Mrs. Florence Whitehead and occupied by Dent Bros. and J. H. Whitehead.

Ga., Winder.—Fuller Grocery Co.'s store; Woodruff Manufacturing & Hardware Co.'s store.

Ky., Edmonton.—Residence of A. J. Thompson, cashier of People's Bank of Metcalfe county; loss \$5000.

Ky., Guthrie.—J. W. Keats' residence, known as Bibb House.

Ky., Hodgenville.—Alvin Edwards' residence.

Ky., Tompkinsville.—Pitcock Bros.' store; Bradshaw & Hagan's store; People's Bank building; T. K. Chism's store; Home Telephone Co.'s exchange; D. Kesbauer's store; G. C. Dorsey's store; S. L. Gill's store; loss \$60,000.

La., Columbia.—J. F. Myers' residence; loss \$3000.

La., Consuelo.—E. C. Rhodes' residence.

La., Forest Hill.—Dr. W. H. Dean's store; loss \$10,000.

La., Lake Charles.—L. Kaufman's building; loss \$4000.

La., New Orleans.—Manson Bros.' building at Canal and River Sts.; loss \$50,000.

La., Shreveport.—Liddell Produce Co.'s warehouse; loss \$3000.

La., Shreveport.—Residences in Texarkana annex of A. D. Callicote, Will Walters, S. C. Shofer, J. G. Abner and Mrs. A. Lacoste; loss \$15,000.

La., Washburn, P. O. at Shreveport.—Washburn Lumber Co.'s sawmill and drykilns.

Md., Baltimore.—August Milke's residence at 1702-1704 E. Fort Ave.; loss \$5000.

Md., Baltimore.—Carnegie Steel Co.'s 200x300-foot shop (one of four) at Bush and Wilconico Sts.; steel and corrugated iron, with wood roof and slag top; loss about \$100,000; main office at Pittsburgh, Pa.

Md., Mullinix.—Joseph H. Mullinix's flour-grist and saw mill; loss \$9000.

Md., Tilghman.—George Haines' building.

Miss., Aberdeen.—George W. Pickle's stables; loss \$10,000.

Miss., Como.—Phoenix Cotton Oil Co.'s plant; estimated loss \$100,000.

Miss., Florence.—Flowers Drug Co.'s building; Ancient Free and Accepted Masons' building; Mrs. Harvey's building; loss \$10,000 to \$25,000.

Miss., Georgetown.—J. T. Skinner's residence.

Mo., Butler.—C. A. Allen's residence; loss \$11,000.

Mo., Ballwin.—Edward Blinne's store on Manchester Rd.; loss \$4000.

Mo., Kansas City.—Uncompleted apartment house at 2415 Linwood Blvd., owned by P. W. Price, 3923 Baltimore Ave.; loss \$15,000.

Mo., Kansas City.—New York Life Building annex destroyed and main building damaged; loss \$30,000.

Mo., Kansas City.—Charles W. Armour's cattle and implement sheds and chicken-house; loss \$5000.

Mo., Wellston, Station St. Louis.—Agnes Tully's residence at 1522 Wellston Ave. and five other residences; loss \$10,000 to \$15,000.

Oklahoma City.—Beaver Hotel, loss \$3000; J. B. Gardner's residence, loss \$7000.

Oklahoma City.—Oklahoma State Bank building; First National Bank building; A. L. Millsap's store; J. B. Schuler's store; Michael Hardware Co.'s building; Gates & Son's store; Mike Gordon's store; Spurgeon & Smith's building; loss about \$40,000.

Oklahoma City.—Roy Skinner's building; Dr. C. B. Kirkpatrick's office building; S. M. Blanchard's building; T. A. Trammell's store; loss \$7500.

Oklahoma City.—McAlester. Residence of Dr. R. A. Munn of Ashland, Okla.

Oklahoma City.—McAlester.—Morgan Hotel; J. S. Pepper's residence and other buildings.

S. C., Darlington.—John McCown's residence.

S. C., Greenwood.—J. W. Bodie's stores; loss \$6000.

S. C., Monetta.—James Barton's residence, owned by estate of Moses Holstein.

S. C., Sumter.—Sumter Transfer Co.'s stable, owned by A. D. Harby, and two buildings owned by J. K. Crosswell.

S. C., Union.—J. T. Harris' residence.

Tenn., Alamo.—R. L. Thompson's two buildings at Main and Bells Sts.; loss \$3500.

Tenn., Jonesboro.—W. L. Vines' residence; loss \$3000 to \$4000.

Tenn., Columbia.—Bauman Bakery; estimated loss, \$4000.

Tenn., McMinnville.—Mrs. F. M. Smartt's boarding house.

Tenn., Millington.—J. A. Reddie's store; E. N. Atkinson's store; loss \$10,000.

Tenn., Selmer.—L. A. Jenkins' residence.

Tenn., Shelbyville.—Cumberland Telephone & Telegraph Co.'s exchange, loss about \$3000; Shelbyville Gazette building; both structures owned by W. A. Frost; estimated loss, \$6000.

Tenn., Woodbury.—E. H. Lehmann, Walter Hancock, L. H. McEary and W. R. New will erect fireproof hotel.

Tex., Adkins.—Dudek & Stanush's store, postoffice and residence owned by Mr. Dudek; loss \$13,000 to \$15,000.

Tex., Blooming Grove.—Pruitt Bldg., occupied by Barron-Tyler Dry Goods Co.; Ingram & Sons, Telephone Exchange and other offices; loss \$50,000.

Tex., Cleburne.—T. W. Scott's building, occupied by Moore's House of Bargains; loss \$16,000.

Tex., Dallas.—Building owned by Adam Schaub and occupied by Goodspeed Bros., etc.; loss \$10,000.

Tex., Dallas.—M. J. Templeton's residence at Tremont and Russell Aves.

Tex., Fort Worth.—Ellison Furniture Co.'s warehouse at 5th and Terry Sts. and 15 small cottages; loss \$25,000.

Tex., Fort Worth.—Emmett J. Echols' residence at 1720 Cooper St., loss \$3000; T. J. Sliger's residence.

Tex., Fort Worth.—F. E. Keith's residence and barn at Stop 1 on Dallas-Fort Worth Interurban; loss \$7500.

Tex., Josephine.—Mowdy & Seaman's cotton gin; loss \$7000.

Tex., Lubbock.—D. C. Worsham's store, loss \$10,000; Simeon O'Neal's store; Tubbs Confectionery Co.'s store.

Tex., Manning.—Carter-Kelley's Lumber Co.'s planing-mill; estimated loss, \$30,000 to \$25,000.

Tex., McKinney.—Mrs. E. N. McCauley's residences; loss \$8000.

Tex., New Boston.—J. W. Weaver's residence; loss \$3500.

Tex., Bonham.—Bonham Steam Laundry; loss \$4000; H. C. McAnally, owner.

Tex., Sherman.—C. M. Everheart's residence at 810 N. Elm St., owned by G. H. Jackson of Waco, Tex.; loss \$3000.

Tex., Taylor.—Grace Hotel building on West 2d St., owned by A. Alexander; loss \$12,000 to \$15,000.

Tex., Terrell.—Sam St. Mary Home.

Tex., Waco.—Michael Norris' cotton gin.

Tex., Waxahachie.—Charles A. Pippen's residence; loss \$3500.

Tex., Waxahachie.—Buildings of William Adkisson of Dallas, Tex., loss \$5000; W. E. Coleman, loss \$5000; R. Vickery, Fort Worth, Tex., loss \$14,000.

Va., Pocahontas.—Two buildings at Church and Center Sts., owned by Edward and Eliza

Holland and G. W. Mays, H. Miller and Norman Kwass; loss \$7500.

Va., Roanoke.—Mrs. J. A. Watts' residence at 118 Ninth Ave. S. E.; loss about \$5000.

Va., Staunton.—Double dwelling owned by C. E. Early of Cox & Early, and occupied by Jefferson Driver and Paul J. Garber; loss on building \$3000.

W. Va., Keystone.—Wilcox Hotel.

W. Va., Shady Spring.—Henry and Robert Massey's saw and grist mill; loss \$2500.

W. Va., Bluecreek.—Parsons & Pettit's store; Milton Bros.' store; Robinson Hotel,

owned by J. M. Robinson and E. F. Jackson, both of Charleston, W. Va.; loss \$3000; total loss about \$50,000.

DAMAGED BY STORM

Va., Richmond.—Surbrug Tobacco Co.'s plant at 9 N. 22d St. damaged; estimated loss, \$10,000.

WRECKED

W. Va., Guyandotte.—Chesapeake & Ohio Railway's bridges over Guyandotte River; F. I. Cabell, chief engineer, Richmond, Va.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ga., Atlanta.—Fitzhugh Knox Company, Candler Bldg., will, it is reported, erect apartment-house at 45 W. Cain St.; estimated cost \$100,000.

Ga., Savannah.—A. S. Rosenhoff will erect store and apartment building. (See "Stores.")

Ky., Paris.—John Sauer will erect business and apartment building. (See "Stores.")

La., Baton Rouge.—Mrs. Robert C. Wickliffe will erect apartment-house.

Md., Baltimore.—Israel Silberstein, 812 Equitable Bldg., will erect two apartment-houses, etc. (See "Dwellings.")

Mo., Kansas City.—Johnson & DeLano will erect six-apartment flat at 3431-33 Hilmes St.; brick and stone; three stories; cost \$30,000.

Mo., St. Louis.—L. J. and Thomas P. Saum will erect two-story tenement-house at 3350-52 DeTonty St.; cost \$7000.

Mo., St. Louis.—R. Mederacke will erect two-story tenement-house at 4210-12 Harris St.; cost \$5000.

Mo., St. Louis.—Leo Motzel will erect two-story tenement-house at 2026-26a E. Prairie St.; cost \$3400.

Mo., St. Louis.—John W. Koester will erect two-story tenement-house at 3307-09 Union Blvd.; cost \$4500.

Mo., St. Louis.—Joseph Stauder will erect apartment-house on Wyoming St. between Spring and Gustine Sts.

Mo., St. Louis.—Catherine Ryan will erect three-story tenement-house at 5527 Waterman St.; cost \$15,000.

Mo., St. Louis.—Thomas J. O'Loughlin will erect store and apartment building. (See "Stores.")

N. C., Charlotte.—H. C. Link has plans for store and apartment building. (See "Stores.")

S. C., Aiken.—J. T. Shuler is having plans prepared for apartment and store building. (See "Stores.")

Tex., Dallas.—Bids opened about January 4 by Miss McBride to erect proposed apartment-house; 30x75 feet; brick veneer; composition roof; brick mantles, oak floors, face brick exterior and stone trimmings; cost \$8000; plans by Associated Architects, 513 Slaughter Bldg., Dallas.

Tex., Dallas.—Hugo Nagy will erect two-story frame apartment building at 3712 Junius St.; cost \$4000.

Tex., El Paso.—Dr. M. O. Wright has plans by H. M. Beutell, Jr., for apartment-house at North Stanton and Montana Sts.; three stories; 21 apartments of two, three and four rooms; semi-fireproof; cost \$30,000.

ASSOCIATION AND FRATERNAL

Ala., University.—University of Alabama Chapter of Sigma Alpha Epsilon Fraternity contemplates erection of rooming-house; Tudor style; cost \$6000.

Ark., Little Rock.—Mosaic Templars of America, William Alexander, president, will have plans prepared by Frank Blaisdell, Little Rock, for building at Broadway and 9th St.; four stories and basement; brick; stone trimmings; first floor for five stores, also room 30x48 feet, to be occupied as printing office by Mosaic Guide; second floor to contain 11 offices in front and lodge-room in rear; auditorium to seat 2000 on third floor; cost \$40,000.

La., New Orleans.—Benevolent Knights of America, it is reported, will erect lodge building on North St.; John D. Nix, Jr., grand commander.

N. C., Charlotte.—Ancient Free and Accepted Masons, it is reported, will erect tem-

ple to cost \$100,000; John M. Scott, chairman of committee.

N. C., Greensboro.—Independent Order of Odd Fellows will remodel lodge building on West Market St.; will extend depth 25 feet, install front of iron work and pressed brick, remodel interior, etc.

Tenn., Nashville.—Aerie No. 86, Fraternal Order of Eagles, Hon. Hilary E. Howse, chairman of home committee, purchased Frazier residence at Eighth Ave. and Union St., and will remodel for lodge purposes; will install heating system, shower and tub baths, etc.

Tex., Brownwood.—Grand Lodge, Independent Order of Odd Fellows, will establish home on George Adams property of 257 acres at Coggin Ave. and Lower Brady Rd.; will install water main to furnish water for domestic purposes, electric-light and telephone connections, etc.; plan is to erect main building to be combination administration, school and dormitory building, to cost about \$75,000, first, and erect other structures later; probably Brownwood brick and reinforced cement.

Tex., Sweetwater.—Benevolent Protective Order of Elks plans to erect lodge building.

BANK AND OFFICE

Ark., Hoxie.—Sharum-Benningsfield Lumber Co. organized with \$25,000 capital stock; is erecting office building, etc. (See "Lumber Manufacturing.")

Ark., Little Rock.—H. F. Auten is having plans prepared by George R. Mann, Little Rock, for office building at Markham and Center Sts.; 70x150 feet; two lower floors of white limestone; upper stories pressed brick with limestone trimmings; fireproof steel door and sash frames; tile floors on concrete bases, supported by steel floor beams; architect wires Manufacturers Record: "Building will be 15-story steel-frame structure; first story to be occupied by a trust company; upper stories for office purposes; cost between \$500,000 and \$600,000."

Ark., Little Rock.—Southern Trust Co. is interested in plan to erect 15-story office building at 2d and Center Sts. A. C. Read of the company wires Manufacturers Record: "Not far enough along to give details."

Ark., Little Rock.—Mosaic Templars of America will have plans prepared for office, store and lodge building. (See "Association and Fraternal.")

Fla., Dade City.—William Redding has not selected architect to prepare plans for office and store building recently noted. (See "Stores.")

Fla., St. Petersburg.—Noel A. Mitchell will be president of banking company to be organized; will erect bank building; 40x120 feet; 10 stories. (See "Machinery Wanted.")

Fla., St. Petersburg.—L. C. Hefner will erect office building; fireproof; cost several thousand dollars.

Ga., Savannah.—Incas Realty Co. acquired Provident Building at Drayton and Bryan Sts. for \$80,000, and is reported as to erect several additional stories.

N. C., Charlotte.—Southern Loan and Savings Bank is having plans prepared by Louis H. Asbury, Charlotte, for improvements to bank building.

N. C., Goldsboro.—Grant Realty Co. has plans by J. M. McMichael, Charlotte, N. C., for store and office building; 75x75 feet; fireproof construction; to contain two stores and 54 offices; details not complete; probably employ superintendent; bids asked. (Recently noted at Goldsboro, S. C.)

Tenn., Chattanooga.—Volunteer State Life Insurance Co. is reported as to erect bank and office building at Ninth and Georgia Aves.

Tex., Dallas.—Henry D. Lindsley has plans for store and office building. (See "Stores.")

Tex., Dallas.—R. B. Stichter, general manager of Texas Traction Co., is reported as to erect office building on Commerce St. near Murphy St.; six stories.

Tex., Dallas.—Republic Trust Co. purchased five-story building at 1305-07 Main St. and will, it is reported, erect four additional stories.

Tex., Dallas.—American Express Co. will expend \$3825 for alterations to building at 1201 Elm St.

Tex., Fort Worth.—Fort Worth & Denver City Railway, R. C. Gowdy, chief engineer, Fort Worth National Bank Bldg., is reported as to erect office building at 7th and Taylor Sts.

Tex., Houston.—William A. Wilson Realty Co. purchased building on Franklin Ave. and will enlarge and improve.

Tex., Lampasas.—First National Bank will remodel building for banking purposes.

Tex., Seagoville.—M. P. & R. C. Hawthorne will erect bank building. (See "Stores.")

Va., Richmond.—Cameron Stove Co. will erect office building, etc. (See "Warehouses.")

CHURCHES

Ark., Pine Bluff.—First Christian Church, Rev. C. C. Cline, pastor, will erect edifice; brick; cost \$20,000.

D. C., Washington.—All Souls' Unitarian Church is having plans prepared by Donn & Deming, 808 17th St. N. W., Washington, for edifice and Everett Hale Memorial Parish-house at 16th and R Sts.; architects wire Manufacturers Record: "Stone exterior; sandstone and limestone trimmings; slate roof; Gothic type; cost about \$200,000; plans not on market; main auditorium 63x93 feet; Sunday-school 40x61 feet; tower 30x30 feet, 130 feet high; tile, marble and wood floors; ornamental plaster and wood ceilings; steam modulating system; ventilating fan; electric lights; pipe organ; reception-rooms, dining-rooms, study, gamerooms, etc."

Fla., St. Petersburg.—Catholic Church will erect proposed edifice at 4th St. and Third Ave. Address The Pastor, Catholic Church.

Ky., Louisville.—Virginia Avenue Methodist Episcopal Church will expend \$10,000 to erect addition to edifice. Address The Pastor, Virginia Avenue Methodist Episcopal Church.

Ky., Louisville.—West Broadway Reformed and Immanuel Presbyterian Churches consolidated as Immanuel Presbyterian Church with Rev. T. N. Williams pastor, and will erect edifice.

La., New Orleans.—Grace Church is arranging to erect edifice in Rampart St. Address The Pastor, Grace Church.

Mass., Brookhaven.—Baptist congregation, Rev. W. H. Morgan, pastor, will expend \$23,000 to erect dwelling; 74x112 feet; brick; electric lighting; tile roof; plans by J. O. Parr, Oklahoma City, Okla.; proposals may be addressed to N. T. Tull, secretary. (Recently noted.)

Mo., Joplin.—W. T. Jones, district superintendent of Methodist Episcopal Church, Carthage, Mo., is reported as interested in erection of edifice at Lakeview.

Mo., Pittsburg.—First Methodist Church has plans by J. O. Munn for edifice at 5th and Pine Sts.; two stories; brick and stone; basement to contain kitchen and dining-room, etc.; main auditorium to seat 2000; cost \$40,000.

Mo., Pittsburg.—Christian Church is reported as considering erection of edifice. Address The Pastor, Christian Church.

Mo., Pittsburg.—United Presbyterian Church is having plans prepared for edifice; cost at least \$45,000. Address The Pastor, United Presbyterian Church.

Mo., St. Louis.—Lindell Avenue Methodist Episcopal Church, Benjamin F. Knauff, representing trustees, plans to erect edifice.

Mo., St. Louis.—Grand Avenue Presbyterian Church opened bids to erect chapel; Murch Bros. Construction Co., St. Louis, Mo., is lowest bidder; plans by A. B. Groves, St. Louis, call for structure 135x230 feet. (Previously noted.)

S. C., Aiken.—Baptist congregation is having plans prepared by G. Lloyd Preacher, Augusta, Ga., for edifice; two stories; stone and brick; reinforced concrete; hot-water heat; cost \$30,000.

S. C., Kingstree.—Williamsburg Presbyterian Church, Rev. P. S. McChesney, pastor, has not selected architect to prepare plans for edifice; probably hot-air furnace; electric lighting; cost \$12,000. (Recently noted.)

Tex., McKinney.—North McKinney Baptist Church will erect edifice; stone and brick;

cost \$10,000. Address The Pastor, North McKinney Baptist Church.

Tex., Orange.—First Baptist Church will erect edifice; 50x100 feet; pressed brick with reinforced concrete foundation; red tile roof supporting 30-foot dome; auditorium to seat 1300; pipe organ; cost \$20,000 to \$30,000; plans by S. R. Blocher, Longview, Tex.

Tex., Sweetwater.—Central Presbyterian Church will erect edifice at N. 2d and Elm Sts.; brick construction. Address The Pastor, Central Presbyterian Church.

W. Va., Bluefield.—Scott Street Baptist Church, Rev. Bullock, pastor, will rebuild burned edifice; brick; cost \$7000 or \$8000.

CITY AND COUNTY

Ga., Boston.—Library.—City will erect \$6000 Carnegie Library. Address The Mayor.

Mo., St. Louis.—Bathhouse.—City will receive bids until January 14 to erect Public Bathhouse No. 3; plans, specifications and form of contract at office of president of Board of Public Improvements.

Okla., Collinsville.—City Hall, etc.—City will erect building to be occupied as city hall, police court, jail and fire station; 50x110 feet; brick; tar and gravel; cost of city hall, police court and jail, \$11,500; cost of Fire Department equipment, \$3500; William M. Gresham, City Clerk. (Recently noted as to vote in January on \$40,000 bond issue to erect city hall and extend water department, etc.)

Okla., McAlester.—Library.—Library Association accepted plans by Walsh & Moore, McAlester, for Carnegie Library; Carthage stone or gray green enamel brick; moss green tile roof. (Recently noted.)

Tex., Dallas.—Fire Station.—Board of Commissioners purchased site at 10th and Van Buren Sts. in Oak Cliff and will erect fire station.

Tex., Dallas.—City Hall.—City will receive bids at office of J. B. Winslett, City Secretary, until January 31 to erect city hall at Commerce and Harwood Sts. according to plans by C. D. Hill & Co., 723 Wilson Bldg., Dallas; four stories, basement and sub-basement; granite, stone, terra-cotta and brick; fireproof construction; provision for two additional stories later; elevators; cost \$425,000 to \$475,000; Mauran, Russell & Crowell, consulting architects, St. Louis, Mo.; certified check for \$20,000. (Previously fully detailed.)

Tex., Waco.—City Hall.—City contemplates remodeling and improving city hall; J. H. Mackey, Mayor.

Va., Christiansburg.—Jail.—Montgomery County Supervisors ordered election January 30 to vote on \$15,000 bond issue to erect jail.

COURTHOUSES

Ga., Athens.—Proposals addressed to chairman of Board of Commissioners of Roads and Revenues, Clarke county, care Tate Wright, clerk, received until February 4 for labor and material to erect courthouse; three stories, basement and mezzanine; ground area, 95 feet 8 inches x 139 feet 4 inches; for plans and specifications address A. Ten Eyck Brown, architect, 607 Forsythe Bldg., Atlanta, Ga. (Recently noted as to let contracts February 1.)

Tex., Corpus Christi.—Nueces county contemplates voting on \$100,000 or \$125,000 bond issue to erect courthouse. Address County Commissioners.

Tex., Fairbairns.—Brooks county voted \$90,000 courthouse bonds; structure to be 80x100 feet; two stories and basement; fireproof; steam heat; electric lighting; gravel roof; brick and stone trimmings; granite steps; tile partitions; tile floors; marble wainscoting; bids opened about March 1; cost \$80,000; plans by Atlee B. Ayres, San Antonio, Tex.

DWELLINGS

Ala., Birmingham.—Sam Erlick will erect residence at Clarendon Ave. and 17th St.

Ala., Josephine.—E. M. Lainge will erect bungalow.

Ark., Little Rock.—J. L. Winchester will erect two-story frame cottage at 109 Pearl Ave.; cost \$4000.

D. C., Washington.—G. G. Easley will erect two residences at 3420 and 3431 Porter St.; cost \$7500 each.

D. C., Washington.—Harry Wardman, 1342 New York Ave. N. W., will erect nine two-story dwellings at 1412 to 1428 Perry St. N. W.; cost \$27,000.

D. C., Washington.—C. W. King, Jr., 920 New York Ave. N. W., will erect five two-story dwellings at 2128-36 20th St. N. W.; cost \$18,000.

Fla., Jacksonville.—A. L. Lewis will erect

two two-story frame dwellings at 8th and East Sts.

Fla., Jacksonville.—C. D. Rinehart will erect two-story dwellings at 2d and Hubbard Sts.

Fla., Jacksonville.—Martinez Charles Company, Fred R. Charles, manager, 710 W. Bay St., opens bids about January 10 or 15 to erect (recently noted) 22 cottages for employees; 4 to 10 rooms each; steam heat; bathroom and running water; electric lighting; average cost \$600 each. (See "Miscellaneous Factories.")

Fla., Monticello.—T. T. Turnbull has plans by Hentz & Reid, Candler Bldg., Atlanta, Ga., for dwelling; two stories; frame; cost \$500.

Fla., Tampa.—Mrs. Elizabeth White will erect residence to replace burned structure. (Previously reported burned at loss of \$10,000.)

Ga., Atlanta.—G. T. Murphy will erect residence on Capitol Ave.

Ga., Atlanta.—M. M. Neese will erect several bungalows.

Ga., Atlanta.—A. W. King will erect residence on Piedmont Ave.

Ga., Atlanta.—Benjamin L. Phillips has plans by Hentz & Reid, Candler Bldg., Atlanta, for dwelling; two stories; brick veneer or hollow tile; hardwood floors; steam heat; cost \$25,000.

Ga., Atlanta.—Mr. Campbell has plans by Hentz & Reid, Candler Bldg., for dwelling; two stories; frame; hardwood floors; cost \$10,000.

Ga., Atlanta.—Hentz & Reid, Candler Bldg., are preparing plans for dwelling; two stories; brick veneer; cost \$7500; will let contract in about six weeks.

Ga., Augusta.—Harry Morris is having plans prepared by G. Lloyd Preacher, Augusta, for dwelling; two stories; brick, frame and concrete; hot-water heat.

Ga., Augusta.—Mrs. M. R. Stokes is having plans prepared by G. Lloyd Preacher, Augusta, for dwelling; two stories; frame and concrete; cost \$10,000.

Ga., Rome.—Massachusetts Mills in Georgia, Lindale, Ga., will erect, it is reported, two double dwellings of 10 rooms each on Avenue D; construction in charge of T. J. Eubanks; will also erect dwelling on Avenue B, to be occupied by A. A. Chapman.

Ga., Savannah.—Mrs. Sarah E. Brown will erect residence on 40th St.; two stories.

Ga., Savannah.—Richard Roach will erect three two-story dwellings on Arnold St.

La., Shreveport.—Joseph E. Johnston purchased 20 lots in Queensborough, and will erect residences.

Md., Baltimore.—H. Fillmore Carter, Mt. Holly and Windsor Aves., will erect 12 2½-story dwellings on Allendale St. near Mondawmin Ave.; brick; slate tile roofs; steam heat; 16x50 feet; cost \$42,000; plans by Stanislaus Russell, 2900 Clifton Ave., Baltimore. (Recently noted to erect 16 dwellings on Allendale St.)

Md., Baltimore.—Wilson R. Russell, Professional Bldg., Baltimore, is not preparing plans for dwelling of Charles M. Reeder at Ten Hills, as recently reported.

Md., Baltimore.—Edward C. Pritchett, 1538 N. Broadway, will erect 20 dwellings on Riggs Ave. between Poplar Grove Ave. and Park Blvd.; iron-spot brick; 13x120 feet; porch fronts; six rooms and bath.

Md., Baltimore.—St. Cecilia's Catholic Church, Clifton Ave., Rev. Father Gwynn, pastor, is having plans prepared by George R. Callis, Knickerbocker Bldg., Baltimore, for sisters' house on Clifton Ave. adjoining edifice; three stories; 21x56 feet; facade of Falls Rd. stone; sides of face brick; 11 rooms and three baths.

Md., Baltimore.—Israel Silberstein, 812 Equitable Bldg., purchased tract on Garrison Ave. 298.6x511.6 feet; will cut street through to be known as Ridgewood Park Ave., erect 20 semi-detached stucco cottages on this street to cost \$230,000, and two apartment-houses on Garrison Ave. to cost \$100,000; construction by owner.

Md., Baltimore.—Frank Novak, 744 N. Kenwood Ave., has plans by Joseph F. Hirt, 744 N. Kenwood Ave., Baltimore, for 10 two-story brick dwellings at 2720 and 2710 to 2720 E. Madison St.; eight to be 13x40 feet and two 13x45 feet; cost \$12,000; construction by owner.

Md., College Park.—Dr. Richard W. Silvester will, it is reported, erect residence. Dr. Silvester may be addressed temporarily in care of Rev. C. I. LaRoche, Beltsville, Md.

Md., Salisbury.—Camden Improvement Co. will erect nine brick dwellings to cost \$40,000.

Md., Timonium.—S. Heyman, 14 Guilford Ave., Baltimore, Md., will erect residence.

Mo., Kirkwood.—J. R. Curlee will rebuild residence; 20 rooms; ordinary construction; hot-water heat; electric lighting; tile roof; cost \$25,000; architect not selected. (Recently reported as burned at St. Louis, Mo.)

Mo., Kansas City.—Dr. W. C. Klein will erect residence at 57th St. Ter. and Main St.

Mo., Kansas City.—J. W. Northcott will erect three stucco dwellings at 3926, 3928 and 3930 Flora St.; cost \$2000 each.

Mo., Kansas City.—George M. Hughes will erect two frame dwellings at 2511 and 2513 Elmwood St.; total cost, \$3200.

Mo., St. Louis.—Leopold Friesenhan purchased nine lots in Fletcher Park, and will erect cottages.

Mo., St. Louis.—John Bohnsen acquired site on Plateau Ave. near Forest Ave. 242x173 feet, and will erect number of cottages.

Mo., St. Louis.—B. T. Kearns will erect two-story dwelling at 3109 Allen St.; cost \$6000.

Mo., St. Louis.—George F. Bergfeld Realty Co. will erect residence on McPherson Ave. near Skinner Rd. Parkway; brick, trimmed with Carthage cut stone; granite base and steps; garage in rear; cost \$25,000.

Mo., St. Louis.—Excel Realty & Building Co. will erect two one-story dwellings at 5343-45 St. Louis Ave.; cost \$3000.

Mo., St. Louis.—H. Dilschneider will erect two two-story dwellings at 3657-67 Lafayette St.; cost \$3000.

Mo., St. Louis.—F. Hertfelder will erect two-story dwelling at 5827 Highland St.; cost \$3500.

N. C., Dunn.—H. L. Godwin opens bids March 5 to erect proposed dwelling; 80x125 feet; hot-water heat; electric lighting; plans by Benton & Moore, Wilson, N. C.

N. C., Kinston.—Moore & Warren, Newbern, N. C., will, it is reported, erect dwellings on Vernon Heights property.

N. C., Shelby.—J. D. Lineberger has plans by Louis H. Ashby, Charlotte, N. C., for bungalow.

N. C., Shelby.—J. D. Lineberger has plans by Louis H. Ashby, Charlotte, N. C., for dwelling; 42x75 feet; frame; electric lighting; shingle roof; stone columns and coping, chimneys and foundation.

S. C., Bamberg.—J. D. Copeland is having plans prepared by G. Lloyd Preacher, Augusta, Ga., for two-story brick and concrete residence.

S. C., Bowman.—John W. Inabinet will erect residence on Charleston Rd.

Tex., Angleton.—William Exline will erect seven-room bungalow.

Tex., Brenham.—Art R. Bailey will erect residence.

Tex., Brenham.—D. H. Fisher, of chair of science at Blinn Memorial College, will erect two-story frame residence.

Tex., Dallas.—N. M. Harper will erect two five-room frame cottages at 118 and 126 N. Clinton St.; cost \$1500 each.

Tex., Dallas.—M. L. Burke will erect dwelling at 4030 Junius St.; two stories; brick veneer; 20 rooms; cost \$12,775.

Tex., Dallas.—Mrs. Fannie McComas will erect three four-room and one five-room frame cottages at 4303, 4307, 4315 and 4319 Travis St.; cost \$3100.

Tex., Dallas.—R. P. Lindsley will erect dwelling at 826 Zang's Blvd.; cost \$3500.

Tex., Dallas.—R. L. Staten will erect two-story eight-room frame dwelling at 407 N. Winnetka St.; cost \$3500.

Tex., Freeport.—C. P. Kendall of Portland, Tex., is interested in erection of two additional dwellings and store.

Tex., Grand Saline.—James A. Edwards has plans by Associated Architects, 513 Slaughter Bldg., Dallas, Tex., for dwelling; 48x58 feet; ordinary construction; cost \$2500; bids opened January 5.

Tex., Houston.—R. E. Brooks, Henry L. Borden, McDonald Meachum, E. R. Spotts, J. W. Sanders, Frank Andrews, Will Abbey and Will Jones are reported as to erect residences in Montrose.

Tex., Orange.—Joe Aronson will erect residence at 4th St. and Orange Ave.

Tex., Temple.—Temple Heights Improvement Co. will erect 12 cottages; cost \$25,000.

Va., West Point.—A. P. Moore, Richmond, Va., will erect bungalow at Euclid Heights.

Va., Richmond.—R. W. Wood will erect detached two-story brick dwelling at 2516 W. Grace St.; cost \$13,500, and detached brick garage in rear.

W. Va., Wilsonburg.—Charles Linville con-

templates rebuilding residence reported burned.

GOVERNMENT AND STATE

Ala., Cullman.—Postoffice.—Treasury Department, Oscar Wenderoth, supervising architect, Washington, D. C., opened bids to erect postoffice; Rogers & Kaiser, Chicago, Ill., are lowest bidders at \$46,796 for limestone and \$18,189 for sandstone construction. (Previously noted.)

La., Crowley.—Postoffice.—Treasury Department, Oscar Wenderoth, supervising architect, Washington, D. C., opened bids to erect postoffice building; Daniel T. McCarthy, Philadelphia, Pa., is lowest bidder at \$46,900 for limestone and \$47,400 for sandstone construction. (Recently noted.)

Miss., Pascagoula.—Storehouse and Shed.—C. A. F. Flagler, Major, Engineers, Mobile, Ala., will receive bids until January 23 to erect storehouse and shed for shipyard at Pascagoula; information on application.

HOTELS

Ala., Birmingham.—Roden Hotel Co. is reported as to receive bids until January 15 according to revised plans to erect Roden Hotel; approximate cost \$1,000,000; plans by William C. Weston, Birmingham. (Recently noted.)

Ark., Hoxie.—H. F. Spicer will expend \$5000 to erect rooming-house and store recently noted. (See "Stores.")

Ark., Hot Springs.—Arlington Hotel Co. will remodel and erect addition to hotel.

Fla., Miami.—United Investment Co. will be incorporated by Walter Waldin, Dan Hardee and Mr. Ullendorf; plans to erect hotel at 11th and C Sts.; six stories; total investment \$250,000.

Fla., Miami.—W. C. Groves is reported as to erect hotel on 10th St.

Fla., Miami.—Gaston De Berry is reported as considering erection of hotel on 10th St.

Fla., St. Petersburg.—Proprietor of Detroit Hotel will expend several thousand dollars to erect wing to and improve hotel.

Fla., St. Petersburg.—Panama Portal Co. plans to erect fireproof hotel.

Fla., Tarpon Springs.—Tarpon Springs Hotel Co. incorporated with \$20,000 capital stock; J. K. Cheney, president; I. B. Read, vice-president; W. M. Smith, secretary; A. P. Beckett, treasurer, board of directors; will erect 100-room tourist and commercial hotel; contract to be let soon.

Md., Annapolis.—Log Cabin Inn Co., incorporated with \$5000 capital stock by William Tighman Emery, "Fair Acres," near Skidmore; Daniel R. Randall, Northwest and College Aves.; Richard G. Elliott, Arundel Bldg., all of Annapolis; plans to erect log-cabin style rustic hotel to accommodate 50 to 60 guests.

N. C., Altapass.—Holston Corporation will, it is reported, improve Altapass Inn to provide 50 additional rooms, etc.

S. C., Camden.—Ernest B. Richards, Bennettsville, S. C., is reported as promoting erection of hotel.

Tenn., Chattanooga.—Martin Fleming will erect store and hotel building. (See "Stores.")

Tex., Dallas.—R. J. Stichter and D. E. Waggoner will, it is reported, erect apartment hotel on South Akard St.; pressed brick; stone trimmings; four stories; 100x100 feet; elevators; plans by C. D. Hill & Co., Dallas.

Tenn., Jefferson, R. F. D. from Smyrna.—W. W. Dillon, R. A. Coleman, J. H. Bradford and others of Nashville, Tenn., have plans by C. K. Colley, Nashville, Tenn., for Hotel Jefferson at Jefferson Springs, in Rutherford county; three stories; 22x40 feet; 75 bedrooms; also propose to construct automobile road from Jefferson turnpike to Greenwood schoolhouse, etc.; total investment, \$50,000.

Tex., Yoakum.—Hallier Hotel Co., State Bank Bldg., plans to erect hotel at Front and May Sts.; five stories; fireproof; cost \$100,000.

Tex., Waco.—W. R. Orman will erect hotel for negroes at 1st and Franklin Sts.; 50 rooms; brick; several stores on ground floor.

Va., Graham.—Jonathan Boyd is considering erection of wing to Hotel Graham.

Va., West Point.—A. P. Moore, Richmond, Va., will erect proposed Euclid Heights Hotel.

MISCELLANEOUS

Ark., Little Rock.—Infirmary.—St. Vincent's Infirmary, it is reported, expend \$15,000 to \$20,000 to improve infirmary; will install skylights, tile floors and walls, plumbing, lighting and heating fixtures, sterilizing and

operating apparatus, furniture, etc. in east wing.

D. C., Washington.—Parish-house.—All Souls' Unitarian Church is having plans prepared for edifice and parish-house. (See "Churches.")

Fla., Jacksonville.—Clubhouse.—Martinez Charles Co., 710 W. Bay St., will erect clubhouse, etc. (See "Miscellaneous Factories.")

Fla., Tampa.—Clubhouse.—Centro Asturiano Club will receive bids until January 17 at office of Bonfoey & Elliott, Tampa, who revised plans to erect clubhouse. (Recently noted.)

Ga., Atlanta.—Undertaking Establishment.—Harry G. Poole, East Hunter St., will erect building at 96 S. Pryor St.; two stories and basement; 45x140 feet; vault; cost \$25,000.

Ky., Louisville.—Home.—Newsboys' Home, Charles A. Wilson, president, plans to erect home on Green St.; cost \$100,000.

La., New Orleans.—Hospital.—Hotel Dieu will, it is reported, expend approximately \$300,000 to erect buildings for Catholic home for incurables; rear building, three stories, to contain laundry, kitchens, nurses' quarters, etc.; other building to contain operating-rooms, charity wards, etc.; main building to be erected later; fireproof; plans by Andry & Bendernagle, New Orleans. (Recently noted under "Hotels.")

Miss., Hantsboro.—Clubhouse.—Back Bay Club will erect annex to clubhouse.

N. C., Franklin.—Home.—Maxwell Home, in charge of Rev. R. P. Smith, will, it is reported, erect cottage.

N. C., Gastonia.—Hospital.—Thomas L. Craig will erect business and hospital building. (See "Stores.")

N. C., Wilmington.—Pavilion.—Tidewater Power Co., A. B. Skelding, general manager, is reported as to be having plans prepared by H. E. Bonitz, Wilmington, for enlargement of pavilion at Lumina, Wrightsville Beach; plan is to replace columns of ballroom by trusses 40 feet wide, increasing seating capacity to provide accommodations for 500 additional guests, etc.

S. C., Camden.—Hospital.—Hospital committee is having plans prepared by J. B. Urquhart, Columbia, S. C., for hospital building. (Previously noted.)

South Carolina.—Hospital.—South Carolina Baptist Hospital will be chartered with \$200,000 capital stock; John M. Kinard, treasurer, Newberry, S. C. Special committee will meet at Columbia, S. C., January 21, to consider location.

Tex., Houston.—Home.—City Pastors' Association and Star of Hope Mission are reported as to erect home for men; cost \$30,000.

Tex., San Antonio.—Orphanage.—St. John's Orphanage advisory committee accepted plans by F. B. Gaenslen, San Antonio, for orphanage group to replace burned structures; boys' building, to be constructed first, will be two stories and basement, containing assembly hall 24x56 feet, etc.; administration or central building, one story and basement; girls' building replica of boys' building on exterior; one story and basement chapel in rear of central building, connected with all three structures by arcades; also contemplates erection of industrial school and central heating plant back of entire group; all buildings brick and steel construction; stone trimmings; fireproof; accommodations for 300 boys and girls. (Recently noted.)

Va., Alexandria.—Armory.—Company G, First Regiment Virginia Volunteers, has plans to remodel armory on Royal St.; will raise roof and erect additional story, provide gymnasium, reading-room, smoking parlors, drillroom, etc.; building is 65x90 feet; ordinary construction; steam heat; gas and electric lighting; metal roof; cost \$6500; plans being prepared by Mr. Hamilton, care of H. K. Field & Co., Alexandria. (Previously noted.)

Va., Chesterfield.—Sanatorium.—Fonticello Mineral Springs Corporation incorporated with authorized capital stock of \$200,000; John Garland Pollard, president; Dr. J. C. Walton, vice-president; R. M. Kent, secretary-treasurer, all of Richmond, Va.; will erect sanatorium. (Recently noted.)

Va., Norfolk.—Auditorium.—Harvey M. Dickson, C. W. Grandy, Jr., and Fergus Reid are reported as interested in erection of auditorium.

RAILWAY STATIONS, SHEDS, ETC.

Ala., Bessemer.—Alabama Great Southern Railroad, C. Dougherty, chief engineer, Cincinnati, O., will, it is reported, erect passenger station; two stories; brick; cost \$15,000 to \$25,000.

Ky., Lexington.—Kentucky Traction &

Terminal Co. leased building at Main and Limestone Sts. and will remodel for terminal station.

Ky., Shelbyville.—Louisville & Interurban Railroad Co. is reported as to erect depot at 2d and Main Sts.

La., Baton Rouge.—Louisiana Railway & Navigation Co. will erect freight shed on Front St.

Okla., Antlers.—St. Louis & San Francisco Railroad Co., M. C. Byers, chief engineer, Springfield, Mo., will erect depot to replace burned structure.

Tex., Beaumont.—St. Louis & San Francisco Railroad Co., M. C. Byers, chief engineer, Springfield, Mo., will expend \$25,000 for improvements to freight terminal and passenger station.

Tex., Bellville.—Gulf, Colorado & Santa Fe Railway Co., F. Merritt, chief engineer, Galveston, Tex., will erect depot; red-faced brick joined with white cement mortar; dark green glazed tile roof; 28x129 feet; white waiting-room, 32x25 feet; colored waiting-room, 23x25 feet; baggage-room, 22x25 feet; loggia, 22x23 feet; cost \$25,000.

Tex., Caldwell.—Gulf, Colorado & Santa Fe Railway Co., F. Merritt, chief engineer, Galveston, Tex., will erect depot; Queen Anne style; steep gables; base of dark red tapestry brick, three feet six inches, surmounted by gray stucco; green tile roof; cost \$20,000.

Tex., Cameron.—Gulf, Colorado & Santa Fe Railway Co., F. Merritt, chief engineer, Galveston, Tex., will erect station; 28x141 feet; white waiting-room, 41x25 feet; colored waiting-room, 26x25 feet; baggage-room, 22x25 feet; ticket office, 16x16 feet; corridor, 8x6 feet; white enameled brick; glazed green tile roof; open-air loggia, 22x25 feet, paved with vitrified brick and equipped with concrete benches; steam heat; concrete floors; vitrified brick platform 630 feet long; cost \$25,000.

Tex., El Paso.—El Paso Electric Railway Co. will expend \$5000 to enlarge car barns.

SCHOOLS

Ala., Aliceville.—City voted \$11,000 bond issue for school; W. D. Boyles, Mayor.

Ga., Americus.—City will vote January 21 on \$45,000 school bond issue. Address The Mayor.

Ga., Augusta.—St. Joseph's College is having plans prepared by G. Lloyd Preacher, Augusta, for college building; brick; reinforced concrete; electric elevators; steam heat; cost \$100,000. (Previously noted.)

La., New Orleans.—James Gamble Rogers, architect, 11 E. 24th St., New York, states drawings and specifications for Newcombe College buildings, Tulane University, will be sent to owners for final approval in about two weeks. (Full details previously noted.)

Miss., Laurel.—City proposes to issue \$25,000 of bonds to erect school; F. H. Bush, Mayor.

Mo., Kansas City.—Board of Education is having plans prepared by Charles A. Smith, Kansas City, for school in Washington Square; 28 rooms, kindergarten, manual-training and domestic science department and auditorium; roof garden playground, 50x70 feet; cost about \$120,000.

N. C., Pineville.—Mecklenburg County School Commissioners, Charlotte, N. C., will erect and equip high school.

S. C., Blacksville.—School Trustees are having plans prepared by G. Lloyd Preacher, Augusta, Ga., for school building; stone, brick and concrete; steam heat.

S. C., Ehrhardt.—School Trustees are having plans prepared by G. Lloyd Preacher, Augusta, Ga., for school building; two stories; brick.

Tenn., Dickson.—City voted \$10,000 bond issue to complete school under construction. Address The Mayor.

Tex., Amarillo.—Sisters of Incarnate Word will erect school; cost \$20,000. For information address Rev. F. H. Dunn, St. Anthony's Sanitarium, Amarillo. (Previously noted.)

Tex., Bandera.—City voted \$10,000 bond issue to erect school. Address The Mayor.

Tex., Dublin.—City has plans by M. L. Waller, Fort Worth, Tex., to erect school; J. W. Dunlap, secretary Board of Education.

Tex., Fort Worth.—College of Industrial Arts, W. B. Blizell, president, is considering erection of \$125,000 dining hall and dormitory, \$18,000 laundry and expenditure of \$40,000 to complete main college building.

Tex., Houston.—Fullerton-Cage school district voted \$10,000 bond issue for school improvements. Address Fullerton-Cage District School Trustees.

Va., Graham.—City will receive bids until

February 1 through G. R. Ragun, architect, Roanoke, Va., to erect high school; certified check for \$500, payable to J. M. Smith, Mayor; plans and specifications at office of architect or may be had on deposit of check for \$25. (Previously noted.)

Tex., Waco.—City Commissioners authorized election for February 6 to vote on \$100,000 bond issue for schools.

STORES

Ala., Birmingham.—N. B. Hillhouse will erect two-story brick veneer building on South Hanover Circle; cost \$7000.

Ala., Birmingham.—F. M. Thompson will erect two two-story frame buildings at Fourteenth Ave. and Culum St.; cost \$3000.

Ark., Hamburg.—J. W. Simpson receives bids until March 15 to erect business building recently noted; 83x71 feet; reinforced concrete; stoves; electric lighting; roofing not determined; cost \$5000. (See "Machinery Wanted.")

Ark., Hoxie.—H. F. Spicer will expend \$5000 to erect store and rooming-house; 50x70 feet; brick and concrete; pitch and gravel roof. (Recently noted.)

Ark., Little Rock.—H. H. Shell will erect two-story frame building at 2301 Summit Ave.; cost \$4500.

Ark., Little Rock.—Mosaic Templars of America will have plans prepared for store, lodge and office building. (See "Association and Fraternal.")

D. C., Washington.—J. L. Warren, 416 15th St. N. W., will erect brick building at 3821 Livingston St. N. W.; cost \$4500.

D. C., Washington.—Hugh Wallis, 617 12th St. N. W., will expend \$3000 to repair building at 1114 G St. N. W.

Fla., Dade City.—William Redding has not selected architect to prepare plans for store and office building; fireproof construction; cost \$12,500. (Recently noted.)

Fla., Ocala.—S. R. Whaley will erect brick business block; two stories.

Fla., Jacksonville.—H. Christianson will erect four two-story structures on Parker St. between Hill and Albert Sts.

Fla., Miami.—Towmley Bros. opens bids January 15 to erect store and office building; 65x95 feet; three stories; reinforced concrete construction; five-ply Barrett specification roof; plans by August Geiger, 6 Townley Bldg., Miami.

Ga., Atlanta.—S. E. Cooper Grocery Co. will erect brick store building.

Ga., Atlanta.—I. T. Nelson, Montgomery, Ala., will erect two-story brick store.

Ga., Savannah.—A. S. Rosenhoff will erect store and apartment building on W. Broad St.; two stories; brick.

Ga., Waynesboro.—J. H. Whitehead will rebuild store building reported burned.

Ga., Waynesboro.—Mrs. Florence Whitehead will rebuild store building reported burned.

Ky., Paris.—John Sauer will erect business building at Main and 7th St.; upper floor for flats.

Ky., Louisville.—George M. Clark states no changes are contemplated to building as recently reported.

La., Baton Rouge.—Emile Well, New Orleans, La., prepared plans for building; two stories; brick.

La., New Orleans.—E. L. Markel has plans to remodel building at Iberville and Chartres Sts. for Colgate & Co.

Md., Baltimore.—Charles Wilms, 300 N. Howard St., is having plans prepared by Owens & Sisco, Continental Bldg., Baltimore, for store building at 306-308-310 N. Howard St.; two stories; 50x120 feet; two stories.

Mo., Kansas City.—Charles A. Lamphear will erect store and theater building. (See "Theaters.")

Mo., St. Louis.—Thomas J. O'Loughlin will erect store and apartment building at Berlin Ave. and Skinker Rd.; three stories; cost \$40,000.

Mo., St. Louis.—C. J. Francis will erect business building on Morgan Ford Rd.

N. C., Charlotte.—H. C. Link has plans by Louis H. Asbury, Charlotte, for store and apartment building; two stories and basement; brick; electric lighting; metal roof.

N. C., Gastonia.—Thomas L. Craig will erect business building, probably with veterinary hospital in rear; 50x202 feet; two stories.

N. C., Goldsboro.—Grant Realty Co. has plans for store and office building. (See "Bank and Office Buildings.")

N. C., Jacksonville.—John Scott is having plans prepared by H. E. Bonitz, Wilmington, N. C., for store building; two stories; brick; cost \$5000.

S. C., Aiken.—J. T. Shuler is having plans prepared by G. Lloyd Preacher, Augusta, Ga., for store and apartment building; two stories; brick and stone; five stores on first floor.

S. C., Greenville.—Mrs. Charlotte R. Smith will erect business building.

S. C., Lexington.—H. N. Kammer will erect two storerooms to replace burned structure. (Recently reported burned.)

Tenn., Chattanooga.—Walton & Pool will erect building at Glass St. and Chamberlain Ave.; three stories; brick.

Tenn., Chattanooga.—Martin Fleming will erect store and hotel building at 9th and A Sts.; two stories; 262x150 feet; cost \$50,000.

Tenn., Memphis.—Hank & Cairns, architects, Memphis, will receive bids until February 15 to erect E. C. Atkins Company Bldg. at Main St. and Butler Ave.; four stories; reinforced concrete; cost \$65,000; 50x190 feet; steam heat; electric elevator; gravel roof; E. L. Boyle, owner.

Tenn., Nashville.—Campbell-Beesley Company will remodel storerooms at 412-14 Union St.

Tenn., Nashville.—Cain-Sloan Dry Goods Co. will improve store building on Fifth Ave.; remodel exterior, install front of plate glass, white and emerald tile and nicked metal; two show windows; windows of plate glass with verde marble bases; vestibule paved with unglazed white tile.

Tex., Dallas.—Henry D. Lindsley has plans by Lang & Wtchell, Dallas, Tex., for store and office building at Main and Poydras Sts.; two stories and basement; two stores, each 25x40 feet, and three 20x50 feet; brick and mill construction; offices on second floor; cost \$30,000.

Tex., Dallas.—J. E. Grant will erect two-story brick building at 421 N. Harwood St.; 75x175 feet; cost \$10,000.

Tex., Dallas.—Mrs. A. P. Fitzgerald Estate will erect building at 515 S. Ervay St.; one story; brick; cost \$3000.

Tex., Fort Worth.—Monnig Dry Goods Co., William Monnig, president, is reported as to erect business building; eight stories.

Tex., Freeport.—C. P. Kendall of Portland, Tex., is interested in erection of store. (See "Dwellings.")

Tex., Seagoville.—M. P. & R. C. Hawthorne will erect three stores and one bank building to be occupied by W. C. Berry & Co., J. P. Maris & Co. and others.

Tex., Waco.—W. R. Orman will erect store and hotel building. (See "Hotels.")

Va., Norfolk.—Alvah H. Martin receives and opens proposals at office of James W. Lee and William Newton Diehl, architects, 408 Seaboard Bank Bldg., Norfolk, January 15, to erect business building at Granby and Washington Sts. for Willis-Smith-Crall Company; six stories, basement and mezzanine; 90x110 feet; steel and fireproof construction; following contractors invited to bid: J. Henry Miller, Inc., 106 Dover St., Baltimore, Md.; Parlett & Parlett Co., Annapolis, Md.; Melton Construction Co., 11th and H Sts. N. W., Washington, D. C.; R. H. Richardson & Sons, Richardson Construction Co., Vega & Richardson, Baker & Brinkley, Gregory & Williamson, J. H. Pierce, East & Hobbs, E. L. Myers, Jesse Johnson, J. W. Jones, all of Norfolk. (Previously noted under "Bank and Office Buildings.")

Va., Richmond.—J. H. Chappell will erect three-story detached brick store at 309 E. Main St.; cost \$7000.

Va., Richmond.—August Simonpetri will erect two brick stores on Hull St. between 13th and 14th Sts.

Va., Staunton.—Lawrence W. H. Peyton will erect building at Central Ave. and Frederick St.

THEATERS

Ark., Little Rock.—Theodore M. Sanders, architect, Little Rock, receives bids until January 9 to construct basement and foundation for theater at Spring St. and Capitol Ave. for Abe Stowell; 65x150 feet; auditorium to seat 1500; garden 85x150; fireproof; fan heating system; certified check for \$250, payable to owner; plans from architect, Rooms 39-41 Urquhart Bldg., Little Rock. (Recently noted.)

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ark., Little Rock.—City Market & Arcade Co. awarded contract for refrigerating and engineering work of market and arcade building. (See "Miscellaneous.")

Mo., St. Louis.—Jesse Morris Realty & Investment Co. awarded contract to M. Fer-

La., New Orleans.—Herman Fichtenberg is having plans prepared by Favrot & Livaudais, New Orleans, to remodel building at Canal and Dauphine Sts. for theater; cost about \$20,000. (Recently noted.)

Md., Frederick.—William O. Kolb purchased Junior engine-house property on N. Market St.; plans to organize company to convert into moving-picture theater at cost of about \$30,000; is having plans prepared by B. Evard Kepner, Frederick; plan is to provide room 104x40 feet.

Mo., Kansas City.—Charles A. Lamphear will erect store and picture theater at 3316 E. 12th St.; brick; cost \$6000.

Tex., Cleburne.—S. T. Shaw is interested in erection of opera-house.

Tex., Fort Worth.—Andrew Zucarro contemplates erection of moving-picture theater on Main St. between 13th and 14th Sts.

Tex., Fort Worth.—Princess Theater, Joe Aronhoff, manager, will rebuild burned theater. (Recently reported burned.)

Tex., Temple.—C. T. Mahler and associates will erect, it is reported, theater and auditorium; cost about \$25,000.

WAREHOUSES

Ala., Huntsville.—Merrimack Manufacturing Co., main office, Lowell, Mass., will expend \$15,000 to erect warehouse; 50x150 feet; ordinary construction; gravel roof; construction by mill workers under direction of agent. (Recently noted.)

Ark., Pine Bluff.—Westbrook Grain & Commission Co. is reported as to erect warehouse and grain elevator.

Fla., Miami.—Van Steamship Co. will erect addition to warehouse; 15,000 square feet floor space.

La., New Orleans.—Cohn-Gottlieb Realty Co. has plans by Emile Well, New Orleans, for warehouse; two stories; brick and frame.

Md., Baltimore.—Wm. G. Nolting, Keyser Bldg., is having plans prepared by Wyatt & Nolting, Keyser Bldg., Baltimore, for two additional stories to warehouse at Howard and Henrietta Sts.

Md., Baltimore.—Joseph Fisher, 4 S. High St., is having plans prepared by Louis Levy, Philadelphia, Pa., for warehouse at 4, 6 and 8 S. High St.; three stories and basement; 36x100 feet; electric lift.

Md., Salisbury.—T. L. Ruark & Co. will erect warehouse to cost \$35,000.

Md., Baltimore.—Charles McColgan, 12 E. Lexington St., is having plans prepared by Oliver B. Wight, 1008 Munsey Bldg., Baltimore, for warehouse at 401, 403 and 405 N. Calvert St.

Mo., Kansas City.—North Kansas City Development Co. has plans by Hill & Woltersdorf, Chicago, Ill., for building on Charlotte St., to be occupied by Rumley Products Co., La Porte, Ind.; 113x530 feet; fireproof construction; two freight elevators, one of 40,000 pounds capacity; cost \$350,000 to \$400,000.

Mo., St. Louis.—Julius Pitzman will erect one-story warehouse at 20-30 Sidney St.; cost \$7000.

Tex., Houston.—Houston Transfer & Carriage Co. will increase capital stock from \$100,000 to \$150,000 and erect warehouse at foot of Burton St. 100x100 feet; install additional equipment.

Tex., Henderson.—Farmers' Warehouse Co. incorporated with \$2000 capital stock; R. E. Hutson, I. P. Windle and R. M. Richardson.

Tex., Huntsville.—Farmers' Union Warehouse Co. will rebuild warehouse; 100x125 feet; ordinary construction; corrugated galvanized iron; cost \$3500; architect not selected. (Previously reported burned.)

Tex., San Angelo.—C. W. Hobbs will erect wool warehouse; fireproof; cost \$15,000.

Tex., Waco.—Sanger Bros. will erect wholesale building; three stories; 90x190 feet; cost \$75,000; will also expend \$40,000 to enlarge retail store.

Va., Richmond.—Cameron Store Co. will erect detached two-story brick warehouse on 21st St. between Stockton and Decatur Sts.; cost \$4000; also \$3000 one-story brick, steel and concrete machine shop and one-story frame \$1800 office building adjoining.

Nick, 111 N. 7th St., St. Louis, to erect tenement-house; two buildings; three-room flats; 31 feet 6 inches by 50 feet; composition roof; cost \$10,000; plans by Nolte & Nauman, St. Louis. (Recently noted.)

Tenn., Nashville.—Charles Davitt awarded contracts to erect proposed apartment-house at 25th and Ellison Aves., as follows: Fos-

ter & Bush, foundation work; Dillard Bros., concrete work; James L. Howell, carpenter work; A. W. Hutchinson, brick work; Goodrich & McTigue, roofing; Nashville Machine Co., heating and electrical work; David Grewar, plumbing; Phillips & Butteroff, tile and marble work; Frank Pierce, decorating; plans by C. K. Colley, Nashville, call for three-story structure; 12 four and five-room apartments; 90x100 feet; Spanish style; faced with dark mat brick; Bowling Green white limestone trimmings; dark slate roof; mission interior finish; tile floors and wainscoting in bathrooms and corridors; solid porcelain plumbing fixtures; combination gas and electric lights; vacuum steam heat; cost \$35,000.

BANK AND OFFICE

Ark., Little Rock.—City Market & Arcade Co. awarded contract for refrigerating and engineering work on market and arcade building. (See "Miscellaneous.")

Miss., Gulfport.—T. H. Barrett awarded contract to erect office and store building. (See "Stores.")

S. C., Winnsboro.—Winnsboro Bank awarded contract to J. A. Gardner, Charlotte, N. C., to erect building.

Tenn., Memphis.—Marx & Bendorf awarded contract to J. E. Hollingsworth & Co., Memphis, to erect bank building; concrete construction; terra-cotta and glazed brick; two stories; 22x80 feet; cost \$30,000. (Previously noted.)

Tex., Bishop.—C. D. Patterson, Corpus Christi, Tex., has contract to erect bank and store building; 100x100 feet; mill construction; brick; cost \$18,000; plans by Ehlers & Ehlers, Bishop.

Tex., Cotulla.—Stockmen's National Bank has plans by and awarded contract to Gus Berkner to erect bank building; 30x60 feet; brick; gravel roof; cost \$6500. (Recently noted.)

Tex., Galveston.—Gulf, Colorado & Santa Fe Railway Co., F. Merritt, chief engineer, awarded contract to erect depot and office building. (See "Railway Stations.")

Tex., Houston.—Mason Building Co. awarded contract to Horton & Horton, Houston, to excavate for office and store building to replace burned structure; 10 stories; fireproof construction; steam heat; elevators; composition roof; plans by Mauran, Russell & Crowell, 930 Chronicle Bldg., Houston. (Previously noted.)

Va., Norfolk.—Norfolk & Washington Steamship Co. awarded contract to erect offices and warehouse. (See "Warehouses.")

CITY AND COUNTY

La., New Orleans.—Stackroom.—Public Library Board awarded contract to Jefferson Construction Co., 204 Perrin Bldg., New Orleans, to erect stackroom for library building; 55x65 feet; two stories; fireproof construction; five-ply gravel roof; cost \$18,644; plans by Diloll, Owen & Goldstein, 706 Perrin Bldg., New Orleans. (Previously noted.)

DWELLINGS

Ark., Fort Smith.—Ezra J. Morgan awarded contract to J. E. Morgan on percentage basis to erect dwelling recently noted; 39x55 feet; ordinary frame and brick construction; electric wiring and fixtures; Spanish clay tile roof; cost \$20,000; plans by A. C. Chisholm, Fort Smith. (See "Machinery Wanted.")

Fla., Seabreeze.—Henry Almsworth awarded contract to L. Z. Burdick to erect four-room bungalow.

Fla., Tarpon Springs.—Peter O. Knight awarded contract to H. D. Tryon, Elfers, Fla., to erect residence; plans by A. H. Johnson, Tampa, Fla.

Md., Baltimore.—Mrs. Annie Weinstein has plans by F. E. Beall, 213 St. Paul St., Baltimore, for store and dwelling at 503-505 W. 36th St.; two stories; ornamental brick; plate-glass store front; 30x46 feet; cost \$6000; awarded contract to Charles E. Litsinger, 932 W. 38th St., Baltimore.

Md., Frederick.—Fabian Posey awarded contract to Hahn & Betson, Frederick, to erect residence on 4th-street Pike.

Md., Roland Park.—J. R. Hagerty, The Severn, Baltimore, Md., awarded contract to G. Walter Tovel, Eutaw and Dolphin Sts., Baltimore, Md., to erect residence on Overhill Rd.; 84x70 feet; two and a half stories; brick; marble trimmings; hot-water heat; electric lights; cost \$40,000 to \$50,000; plans by Edward L. Palmer, 408 Roland Ave., Roland Park. (Recently noted.)

N. C., Salisbury.—R. L. Mahaley awarded contract to C. R. Probst, Salisbury, to erect two dwellings on North Main St.; cost \$7000.

Tenn., Memphis.—J. H. Stewart awarded contract to R. A. Harris & Son to erect residence at Parkway and Adams Ave.; tile and brick; fireproof; cost \$16,800; plans by John Galsford, Memphis.

Tex., Angleton.—S. B. Palmer, Houston, Tex., awarded contract to erect residence near Angleton.

Tex., Floresville.—L. B. Wiseman awarded contract to G. W. Stephens, 1041 Westfall Ave., San Antonio, Tex., to erect residence; 33x46 feet; one story and a half; frame; ordinary construction; hot-air heat; electric lighting; tin and asbestos shingle roof; cost \$5000; plans by Henry T. Phelps. (See "Machinery Wanted.")

Tex., Houston.—E. Bartholomew awarded contract to erect residence on Ave. C near 15th St.

Tex., Marshall.—G. L. Huffman awarded contract to R. S. Burnett to erect six-room dwelling on South Washington Ave.; cost \$3000.

GOVERNMENT AND STATE

D. C., Washington.—Victor J. Evans, Victor Bldg., awarded contract to George A. Fuller Company, Munsey Bldg., Washington, to erect building for Department of Commerce and Labor at Pennsylvania Ave. and 19th St.; 11 stories and basement; 100x126 feet; brick; terra-cotta and stone trimmings; elevators; cost \$425,000; plans by Milburn, Heister & Co., Union Savings Bank Bldg., Washington. (Previously detailed.)

HOTELS

Ark., Hoxie.—A. B. Gibson awarded contract to H. A. Lesmeister, Jr., Bank of Jonesboro Bldg., Jonesboro, Ark., to erect hotel; 110x146 feet; ordinary construction; hot-water heat; electric lighting; gravel roof; cost \$40,000; plans by Mr. Lesmeister (not H. S. Gussmaster, as recently reported.)

S. C., Hartsville.—Hartsville Arcade Co. awarded contract to Abbeville Lumber Co., Abbeville, S. C., to erect hotel; 115x136 feet; three stories and basement; brick construction; 42 rooms; gravel roof; to contain storeroom; cost \$35,000; plans by E. V. Richards, Bennettsville, S. C. (Previously noted.)

Tex., Dallas.—H. Grosman has plans by Lang & Witcheil, Dallas, for hotel at Commerce & Ray Sts.; 10 stories; concrete and brick; awarded contract for excavation to Fred A. Jones Building Co., Dallas.

W. Va., Charleston.—Holley Hotel Co., organized with \$125,000 capital stock, awarded contract to W. A. Abbitt, Charleston, to erect Hotel Holley on Quarrier St.; 100 rooms, 35 of which will be equipped with private baths; shower baths in each bedroom hall; hot and cold water in all rooms; steam heat; steel and reinforced concrete construction; fireproof; entrance through colonnade front of white terra-cotta and brown enameled brick; six business rooms on ground floor; plans by C. C. and E. A. Webber, Cincinnati, O.

MISCELLANEOUS

Ark., Little Rock.—Market, etc.—City Market & Arcade Co. awarded contract to Tait-Nordmeyer Engineering Co., St. Louis, Mo., for refrigerating and engineering work on market, arcade, office and apartment building; cost \$200,000 to \$500,000; plans by Theodore M. Sanders, Little Rock. (Previously noted.)

Ky., Louisville.—Riding Academy.—Richard Schultze awarded contract to Humphrey & Huber, Louisville, to erect building to replace burned riding academy; 150x400 feet; mill construction; electric lighting; asphalt or tin roof; cost \$9000; plans by W. D. Wolters, Board of Trade Bldg., Louisville. (Recently noted.)

La., New Orleans.—Monastery.—Poor Clare Monastery awarded contract to Jefferson Construction Co., New Orleans, to erect monastery at Henry Clay Ave. and Magazine St.; two stories and basement; fireproof; front of Ohio mission brick; cement trimmings; slate roof; reinforced concrete construction on interior; basement for laundry, store-rooms, boiler and coal rooms; small belfry tower; cost \$51,000; plans by Rev. Father Leonard and William R. Burke; construction under supervision of Mr. Burke. (Recently noted.)

RAILWAY STATIONS, SHEDS, ETC.

Ga., Camilla.—Atlantic Coast Line Railroad, E. B. Pleasants, chief engineer, Wilmington, N. C., awarded contract to erect station; 207 feet long; brick.

Ga., Pidecock.—Atlantic Coast Line Railroad, E. B. Pleasants, chief engineer, Wil-

lington, N. C., awarded contract to erect station.

Tex., Galveston.—Gulf, Colorado & Santa Fe Railway Co., F. Merritt, chief engineer, awarded contract to American Construction Co., Houston, Tex., to erect union depot and office building; plans call for structure 100x125 feet; eight stories; fireproof steel reinforced concrete skeleton faced with brick; vacuum steam heat; cost about \$565,000. (Previously fully detailed.)

SCHOOLS

Md., College Park.—Maryland Agricultural College awarded contract to C. Ernest Nichols, Laurel, Md., to erect series of temporary buildings to replace burned structures; 100x30 feet; frame; slag roof; steam heat; cost \$2500 each; desires sub-bids on erecting steel kitchen; 24x30x10 feet; comb roof; two outside doors and four windows. (Recently noted.)

Okl., Anadarko.—Commissioners of Indian Affairs, Indian Office, Washington, D. C., awarded contract to erect dormitory at Riverside School in connection with Kiowa Agency; ordinary construction; low-pressure steam heat; electric lights; cost \$18,000. (Recently noted.)

Tex., Houston.—City awarded contracts to erect North Side Junior High School as follows: General contract, McGee Construction Co., \$72,589; heating and ventilating, Collings Plumbing Co., \$9429; also to same company, plumbing, gaspiping and sewer work, at \$3942; electric wiring, Barden Electric Manufacturing Co., \$1950; vacuum cleaning, C. A. Cleaver, \$775; steel lockers, R. B. Everett, \$1661. (Recently noted.)

Tex., Palacios.—City awarded contract to H. & A. E. Galbraith, Milford, Tex., to erect school; cost \$20,000; two stories and basement; brick; mill construction; hot-air heat. (Recently noted.)

Tex., Port Arthur.—City awarded contracts as follows to erect school on De Queen Blvd.: General construction, to David Castle Company, Houston, Tex., at \$27,260; heating and plumbing, to W. A. Ebert, Port Arthur, at \$4375.

STORES

Ark., Little Rock.—City Market & Arcade Co. awarded contract for refrigerating and engineering work on market and arcade building. (See "Miscellaneous.")

Fla., Tallahassee.—Levy Bros. awarded contract to E. B. Dyer, Box 335, Tallahassee, to erect proposed building on Adams and Pensacola Sts.; 100x60 feet; five stories; electric lighting; cost \$7000; plans by Mr. Dyer.

La., New Orleans.—Southland Realty Co. awarded contract to A. M. Rennyson, New

Orleans, to erect building at Bienville and Franklin Sts.; cost \$6500.

Md., Baltimore.—Mrs. Annie Weinstein has plans by F. E. Beall, 213 St. Paul St., Baltimore, for store and dwelling; contract awarded. (See "Dwellings.")

Miss., Gulfport.—T. H. Barrett awarded contract to L. L. Chennally, Gulfport, to erect store and office building; two stories; ordinary brick construction; composition roof; cost \$9000; plans by William Drago, 512 Audubon Bldg., New Orleans, La. (Recently noted.)

N. C., Wilmington.—J. T. Runge awarded contract to J. R. Mathews to erect five one-story wooden structures on Howard St. near 9th St. and on 9th St.; cost \$3000.

Okl., Tulsa.—Simon Jankowsky awarded contract to Gross Construction Co., Oklahoma City, Okla., to erect store and office building recently noted; five stories and basement; reinforced concrete; vacuum heat; cost \$81,000; plans by Winkler & McDonald, Tulsa. (See "Machinery Wanted.")

S. C., Lexington.—Frank C. Corley awarded contract to C. E. Corley to erect two stores to replace burned residence. (Recently reported burned.)

S. C., Hartsville.—Hartsville Arcade Co. awarded contract to erect store and hotel building. (See "Hotels.")

Tex., Bishop.—C. D. Patterson, Corpus Christi, Tex., has contract to erect store and bank building. (See "Bank and Office Buildings.")

Tex., Denton.—W. B. McClurken & Co. awarded contract to M. B. Whitlock & Co. to construct new front in building.

Tex., Houston.—Mason Building Co. awarded contract to excavate for store and office building. (See "Bank and Office.")

Tex., Wichita Falls.—O. T. Bacon awarded contract to erect one-story brick building on Ohio Ave.; one-story; brick; 100x150 feet; cost \$22,000.

Va., Norfolk.—H. B. Forrest awarded contract to John H. Pierce, Norfolk, to erect addition to building and remodel present structure; two buildings connected by bridge; will remove partitions, etc.

THEATERS

Tenn., Clarksville.—Joe Goldberg awarded contract to Smith Bros. to erect opera-house.

WAREHOUSES

Va., Norfolk.—Norfolk & Washington Steamboat Co. awarded contract to Sanford & Brooks Co., Commerce and Water Sts., Baltimore, Md., to erect warehouse and offices at foot of Front St.; warehouse of iron and galvanized-iron construction; 50x280 feet; plans by Gwathmey Engineering Co., Norfolk. (See "Miscellaneous Construction.")

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Fayette.—The Baskett Lumber & Manufacturing Co., which has completed five miles of railroad from Fayette, Ala., southward toward Elrod, expects to extend the line from three to five miles each year as timber is cut. Lee Baskett of Henderson, Ky., is interested.

Ala., Gadsden.—The Gadsden, Bellevue & Lookout Mountain Railway is to begin laying track immediately on its three-mile line to Noccalula Falls. Loui Hart is general manager.

Ala., Tuscaloosa.—Morris Bros., bankers, of Philadelphia, are reported to have bought the Birmingham & Gulf Railway and Navigation Co. property at receiver's sale at \$75,000, and the line will be converted to electric operation.

Ark., Camden.—The Rock Island lines are reported preparing to lay tracks on its new line between Camden and Malvern, Ark., 59 miles, of which 47 miles are under construction.

Ark., Little Rock.—W. T. Tyler, general manager of the Frisco System, is reported saying that the company will build a line from Newport, Ark., to Little Rock, about 80 miles, if the citizens of Little Rock cooperate with it. F. G. Jonah, St. Louis, Mo., is chief engineer of construction.

Ark., Mt. Ida.—An official of the Mt. Ida, Ouachita Valley & Hot Springs Railway, now building from Mt. Ida to Caddo Gap, about 10 miles, is quoted saying that an extension of about 40 miles from Mt. Ida to Hot Springs is projected. G. Cox, Mt. Ida, Ark., is president.

Fla., Pensacola.—At a special election \$400,000 of bonds were voted, part of them

for a municipal belt railroad. The Mayor can give information.

Fla., St. Augustine.—Formal notice is published of application to charter the Jacksonville & St. Augustine Public Service Corporation (heretofore reported) to build an electric railroad about 55 miles long connecting South Jacksonville, Pablo and St. Augustine, besides other places; capital stock \$2,000,000. The incorporators are also directors, thus: A. W. Corbett, president; John Andreu, vice-president; D. L. Dunham, secretary; A. E. Bayn, treasurer, and Joseph Lynn. The other directors are C. J. Perry and R. L. Campbell.

Fla., White Springs.—The Pine Springs Railroad Co. (formerly the Florida & Georgia) proposes to build about 10 miles of line between Welborn and White Springs, traversing level country. Active work is not to begin before February 1 to 15. The directors are Cale Danley, president and general manager; W. I. Phillips, vice-president; Nathan Johnson, secretary and treasurer; J. C. West, A. B. Small, C. M. Marsh and Paul Marx. The Pine Springs Development Co. is to purchase the Florida & Georgia Railroad, which was abandoned.

Ga., Fairburn.—It is announced that the Fairburn & Atlanta Railway, 10 miles long, will be converted from gasoline to electric operation by next June.

Ky., Falmouth.—T. G. Stuart, Winchester, Ky., says that the Cincinnati, Licking Valley & Virginia Railroad Co., of which he is vice-president, is not yet ready to announce plans. Other officers are J. B. Walker, president and chief engineer; F. D. Buskirk, secretary and treasurer. (See Manufacturers Record, January 2.)

Ky., Harlan.—The Washtoto & Black Mountain Railway (Louisville & Nashville Sys-

tem) is reported surveying for a branch from Harlan up Martin's Fork of the Cumberland River, 9 miles, to coal fields of the Kentenia Corporation and others. John Howe Peyton, Louisville, Ky., is chief engineer of construction.

Ky., Paducah.—It is officially announced that the Kentucky Southwestern Electric Railway, Light & Power Co. will begin construction of its proposed interurban railway early this year from Paducah via Mayfield to Murray, Ky. H. C. Rhodes of Paducah is president.

Ky., Prestonsburg.—The Caneyville Railway Co. has been incorporated to build a line 12 miles long from the Chesapeake & Ohio Railway up Caney Creek and Middle Creek to transport coal. Capital, \$10,000. Construction will begin immediately. Incorporators, James Sallsbury, B. F. Combs, F. Flanagan, W. F. Hite, W. P. McVay, W. W. Brown and R. Flannigan, all of Prestonsburg, Ky.

La., Vinton.—The Orange & Northeastern Railway, It is reported, will begin grading out of Vinton within 10 days. Edw. Kennedy, Houston, Tex., is president.

Md., Williamsport.—The Western Maryland Railway, it is reported, is about to begin double-tracking its line between Williamsport and Hancock, Md., 20 miles. H. R. Pratt, Baltimore, is chief engineer.

Miss., Wiggins.—Concerning the report that it would build an extension of 10 miles to its line now building between Wiggins and Stilmore, the Finkbine Lumber Co. says that the line is merely a logging road, and will not be separately incorporated. It will be used only for the lumber company's work.

Mo., Kansas City.—Announcement is made that the National Contracting Corporation of Norfolk, Va., has been awarded contract for the construction of the long proposed St. Louis & Kansas City Electric Railway, which will be about 250 miles long; also that work has already begun east of Independence, Mo., by Griffith & McMurray of Kansas City, who have a subcontract. J. E. Cole of Norfolk is president, and M. M. Parker of Washington vice-president of the contracting company. The line will be double-tracked. D. C. Nevin is president of the railway company; John H. Berkshire, vice-president; W. I. Allen, general manager, and George A. Anderson, secretary and treasurer, all at Kansas City.

Mo., Moberly.—The Moberly, Huntsville & Randolph Springs Railway Co., incorporated with \$500,000 capital, will, it is reported, build from Moberly to Randolph Springs, Mo., 12 miles; directors, C. H. Dameron, W. T. Dameron, G. P. Dameron, W. M. Evans and others, all of Huntsville, Mo.

N. C., Wilmington.—Survey is being made by Walter G. MacRae for the construction of an electric car line from Wilmington to Carolina Beach, about 13 miles, by the New Hanover Transit Co. A. W. Pate is president.

Okla., Muskogee.—The Midland Valley Railroad, it is rumored, contemplates an extension to Denver, Colo. C. Kaign, Muskogee, Okla., is chief engineer.

S. C., Charleston.—The Charleston-Isle of Palms Traction Co. reports subscriptions of \$512,000 of its \$1,000,000 of authorized stock and the election of directors thus: James Sottile, president; Lawrence M. Pinckney, secretary; William M. Bird, F. W. Wagener and J. D. Koester. M. Rutledge Rivers is solicitor. It is proposed to issue as soon as the company is chartered \$350,000 of 5 per cent. 25-year bonds. W. W. Fuller is chief engineer.

Tenn., Harriman.—It is officially denied that the Tennessee Central Railroad will be extended from Harriman to Knoxville, Tenn. This refers to a recent press report.

Tenn., Livingston.—Bids for construction of the Tennessee, Kentucky & Northern Railroad will be opened April 1, the proposed extensions from the present line of 16 miles being southward to Sparta, Tenn., and northward to Rock Creek, Ky., a total of 77 miles, which will demand eight steel bridge and one short tunnel. H. Adkins is chief engineer at Livingston, Tenn.

Tex., Asherton.—Reported that the Asherton & Gulf Railroad has let contract for an extension northwest from Asherton to Carrizo Springs, 10 miles. Asher Richardson is president.

Tex., Bogota.—The Paris & Mount Pleasant Railroad has built 10 miles of track from Bogota to Talco, Tex., and will now complete its extension from Talco to Mount Pleasant, 17 miles. M. Tansey of Mount Pleasant is the contractor.

Tex., Bryan.—O. E. Gammill, manager of the Bryan-College Interurban Railway, and L.

M. Hewitt, secretary of the Bryan Commercial Club, are reported to have closed contracts at Houston for the extension of the railway into the Brazos Valley bottom lands, operating in connection with the Southern Pacific lines. Construction is expected to begin soon.

Tex., Dallas.—The Eastern Texas Traction Co., now constructing a railway from Dallas to Greenville, Tex., about 54 miles, has filed mortgage to secure \$2,000,000 of 5 per cent. bonds with the Guaranty Bank & Trust Co. of Houston as trustee. J. W. Grotty of Dallas is vice-president and general manager, and W. A. Obenchain chief engineer.

Tex., Denison.—The Denison-Durant Interurban Railway Co. proposes to build 20 miles of line from Denison, Tex., to Durant, Okla., via Colbert and Calera. Bridge to cost \$60,000 will have to be built over the Red River by the Red River Bridge Co. J. C. Feild is chief engineer, and survey is being made by the Feild Engineering Co., 105-8 Feild Bldg., Denison, Tex. Bridge company is financed. Route is through rolling to rough country.

Tex., Fredericksburg.—The San Antonio, Fredericksburg & Northern Railway Co. has been chartered to build the proposed railroad connection for Fredericksburg, and the line will run from there 25 miles to a point on the Kerrville branch of the San Antonio & Aransas Pass Railway, 4 miles northwest of Waring, Tex. Headquarters at Fredericksburg. Capital \$30,000. Construction has begun. Directors, R. A. Love of Kansas City and San Antonio, president and principal stockholder; Foster Crane, M. H. Trice, R. L. Cunningham, J. H. Halle, F. F. Ludolph and George D. Campbell, San Antonio. President Love is quoted as saying that work will be rapidly pushed.

Tex., Hearne.—The Houston & Texas Central Railroad is reported assembling material for the reconstruction of the Hearne & Brazos Valley Railroad, 19 miles long, which will be part of its route from Giddings via Caldwell and Stone City to Hearne. Construction is well advanced on the new line between Giddings and Stone City, the latter being the terminal of the Hearne & Brazos Valley road. It is expected to have the entire line, which will be between 55 and 60 miles long, in operation by next summer. E. B. Cushing, Houston, Tex., is chief engineer of construction.

Tex., Laredo.—The Laredo Board of Trade is reported working on plans for the construction of a railroad from Laredo to Beeville, Tex., about 120 miles. The secretary of the board may give information.

Tex., Marlin.—E. P. Turner of Dallas is reported investigating with a view to building an interurban railway from Marlin to Temple, Tex., 35 or 40 miles. The Young Men's Business League of Marlin may be interested.

Tex., Paris.—An officer of the Paris & Mt. Pleasant Railroad is quoted saying that after completing extension to Mt. Pleasant it is proposed to build from Paris to Atoka, Okla., and the Lehigh coal fields, about 60 miles; furthermore, it is reported that an extension south from Mt. Pleasant, 15 miles, to connect with the Missouri, Kansas & Texas Railway, is proposed. H. P. Moberly is chief engineer at Paris, Tex.

Tex., Waco.—The Missouri, Kansas & Texas Railway is reported to have let contract to A. M. Clopton of Elgin to widen banks, open cuts and ditches from Waco to Smithville, this being part of the work of reconstructing its line between those points.

Tex., Weldon.—A. M. Acheson, chief engineer of the Missouri, Kansas & Texas Railway, Dallas, Tex., is quoted as saying that three lines have been surveyed for the contemplated extension of the Beaumont & Great Northern Division from Weldon, about 25 miles, west to a connection with the Trinity & Brazos Valley Railway, but it is expected one of the routes will soon be chosen and construction begun.

Va., Portsmouth.—The New York, Philadelphia & Norfolk Railroad proposes to build additional trackage in Portsmouth, Norfolk and Norfolk county. R. V. Massey is superintendent and C. E. Brinser division engineer, both at Cape Charles City, Va.

W. Va., Buckhannon.—The Welsh Colony Railroad Co., with headquarters at Buckhannon, is chartered to own, improve and operate a railroad from Arvonale Junction, on the Baltimore & Ohio Railroad in Randolph county, to Arvon or Penbro, in Webster county, connecting with a railroad which may be constructed; capital \$500; incorporators, Matthew Perkins, Samuel Davies, John P. Williams and D. S. Thomas of Shenandoah, Pa., and Enoch Jones of William Penn., Pa.

W. Va., Canabake.—The Walton Construc-

tion Co. is reported building a coal mine railroad on Vaw Creek, with Walter J. Fink as supervisor of construction.

W. Va., Fairmont.—The Monongahela Valley Traction Co., it is reported, proposed to build several extensions, including one from Gypsy to Lumberport, about two miles, and another from O'Neill westward three miles. J. O. Watson, Fairmont, W. Va., is general manager.

W. Va., Parkersburg.—Concerning a recent report that the Kanawha-Ohio Valleys Trade Promoting Co., of which he is president, would build a railroad from Parkersburg to Charleston, W. Va., about 75 miles, K. B. Stephenson says that a railroad charter will not be taken out until between February 1 and 13, when the plan can be outlined.

STREET RAILWAYS

Ga., Athens.—Local capitalists are reported organizing a new street railway company, and will apply for franchise. The Mayor may give information.

N. C., Newbern.—The Newbern-Ghent Street Railway Co. is reported about to make some extensions. C. J. McCarthy and others are interested.

Okla., Tulsa.—The Tulsa Street Railway

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Abattoir.—Proposals received by City Council, Beaumont, Tex., for furnishing and installing machinery and equipment for municipal abattoir according to plans and specifications and list of machinery and equipment now on file in office of J. G. Sutton, City Secretary; proposals must be filed with City Secretary on or before 10 A. M. February 4, and marked "Bid for Machinery and Equipment." Bids for construction of brick and concrete abattoir building received until same time.

Automobile Ambulance, Electrical Supplies, etc.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C., opens bids January 21 for automobile ambulance, schedule 5087; miscellaneous lot of wrought-iron pipe and 120 screwdrivers, schedule 5093; 1500 feet rubber-covered conductor, 4000 feet sheathed steel conduit, miscellaneous lot of electrical supplies and weatherproof copper wire, schedule 5092; also 120 chestnut poles, 35 feet long, schedule 5093; delivery Navy-yard, Washington, D. C.; for copies apply to navy pay office nearest navy-yard.

Binoculars.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C., receives bids until January 23 for furnishing 100 night binoculars, schedule 5112; delivery Navy-yard, Washington, D. C.

Blackboards.—R. C. Lewis, Abilene, Tex., wants prices on blackboards.

Boiler.—Portsmouth Planing Mills, Inc., Frank C. Lewis, president, Portsmouth, Va., wants prices on second-hand return tubular boiler, 70 to 100 horse-power, 120 pounds of steam.

Boilers.—K. W. Rittenhouse, Box 1002, Columbus, O., wants three 500-horse-power B. & W. Heine or Sterling boilers and one 100-150 horse-power Scotch marine type boiler.

Boilers.—Atlantic Turpentine & Refining Co., 175 Front St., New York, wants two second-hand upright boilers, about 100 horse-power, with capacity for carrying 100 to 125 pounds steam, for plant at Savannah, Ga.

Boxes.—Caddo Lubricant Co., Erich F. Kuehnle, president, 520 First National Bank Bldg., Shreveport, La., wants prices on wooden packages for sweeping compounds. (See "Cans.")

Boiler.—Queen City Engineering & Machine Co., 848 Sixth Ave., West, Cincinnati, O., wants 200-horse-power water-tube boiler. (See "Electrical Machinery.")

Broom Machinery.—Charles A. Leonard, American Southern Baptist Mission, Laichowfu, Shantung, China, wants catalogues from American manufacturers of machinery for making house brooms.

Building Material.—J. W. Simpson, Hamburg, Ark., wants prices on building materials, including cement for \$5000 business building.

Canning Machinery and Equipment.

Co. proposes to build a line through East Tulsa into the Bellview Addition. Some other extension and second-track construction is also to be done, all to cost about \$100,000.

S. C., Spartanburg.—The South Carolina Light, Power & Railway Co., it is announced, has succeeded the former street railway, light and power companies in Spartanburg. A. B. Leach & Co. of New York are interested. Improvements and extensions are provided for under a \$5,000,000 bond issue.

Tex., Waxahachie.—The Southern Traction Co., which is building the interurban railway from Dallas to Waco and Waxahachie, is reported to have begun construction of its street car line in Waxahachie, four miles long, to Chataqua Park and Trinity University.

Va., Richmond.—The Richmond & Henrico Railway Co. proposes to construct important extensions in the east and west ends of the city, and an officer is quoted saying it will begin work upon them as soon as the necessary authority is granted by the council.

W. Va., Morgantown.—The South Morgantown Traction Co., it is reported, will build an extension from its South Park loop to the Sabraton tinsplate mills.

North Jefferson Orchard & Canning Co., A. A. York, secretary, Empire, Ala., wants small canning outfit and several thousand cans.

Canning Machinery.—Jas. H. Warburton, secretary Salisbury Industrial Club, Salisbury, N. C., wants to correspond with manufacturers of canning equipment.

Cans.—Caddo Lubricant Co., Erich F. Kuehnle, president, 520 First National Bank Bldg., Shreveport, La., wants prices on tin packages for axle and cup greases. (See "Boxes.")

Cars.—Stratton & Bragg Company, Petersburg, Va., wants to correspond relative to purchasing 10 or 20 second-hand logging cars of skeleton type, 20,000 or 30,000 pounds capacity, in operative condition, preferably fitted with brakes.

Cars.—Hickson Lumber Co., Lynchburg, Va., wants prices on 20 standard-gauge second-hand logging cars, complete, or 10 60,000-pound second-hand standard-gauge flat cars; delivery at Benettsville, S. C.

Cement.—Board of Awards receives bids until 11 A. M. January 15 at office of Richard Gwinn, City Register, City Hall, Baltimore, Md., for supplies to include about 25,000 barrels of American Portland cement. (See "Engineering Supplies.")

Chain.—See "Engine and Boiler, etc."

Cold-storage Machinery.—James H. Warburton, secretary Salisbury Industrial Club, Salisbury, N. C., wants to correspond with manufacturers of cold-storage equipment.

Conveying Machinery.—See "Dredging Machinery, etc."

Copper.—Hough Turpentine Condenser & Separator Co., Redlevel, Fla., wants prices on 16-gauge, 24 and 30-ounce hard rolled copper.

Cotton Yarn.—American Tape Co., 191 Marietta St., Atlanta, Ga., wants considerable quantity 30s single warp bleached cotton yarn on six-inch tubes.

Dredging Machinery, etc.—G. G. Wood Coal Co., Little Rock, Ark., wants equipment for dredging and conveying sand from river to bins located on bank.

Electrical Machinery.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C., receives bids until February 4 for furnishing seven motors, schedule 5106; delivery Navy-yard, Norfolk, Va.; also receives bids until February 4 for motor and blower, schedule 5107; delivery Navy-yard, Washington, D. C.; for copies apply to navy pay office nearest navy-yard.

Elevator Machinery.—Farmers' Grain & Supply Co., C. T. James, manager, Gage, Okla., wants prices on gasoline engine, scales, etc.

Electrical Machinery, etc.—K. W. Rittenhouse, Box 1002, Columbus, O., wants

two 800-kilowatt alternating-current turbines or reciprocating engines, direct connected units, 3 phase, 60 cycle, 2300 volts; also three 500-horse-power B. & W. Heine or Sterling boilers, and one 100-150 horse-power Scotch marine type boiler.

Electrical Machinery.—Piedmont Electric Co., Asheville, N. C., wants six to eight-kilowatt 125-volt direct connected belted generator; standard make, good condition.

Electrical Machinery.—Sevierville Light & Power Co., Clyde McMahan, president, Sevierville, Tenn., is asking prices for: a. b. factory on following: 50 K. V. A., 60 cycle, 120 R. P. M. generator; exciter; switchboard complete; 30 miles No. 8 and 30 miles No. 10 W. P. copper wire; four 15-kilowatt transformers.

Electrical Machinery.—Queen City Engineering & Machine Co., 848 Sixth Ave., West, Cincinnati, O., wants 100-kilowatt, preferably three-wire, 125-250-volt generator, direct connected to slow-speed four-valve engine; if not three-wire, must be 250-volt; also wants 200-horse-power water-tube boiler for at least 125 pounds regular working pressure steam.

Electrical Machinery.—Cumberland Motor Co. (Henry L. Pitman to be addressed), Pineville, Ky., wants number of electric motors for different machines ranging from one-half to five horse-power.

Elevators.—Simon Jankowsky, Tulsa, Okla., wants addresses of manufacturers of elevators.

Engine.—O. R. Whitney, 39 Cortlandt St., New York, wants second-hand marine engine; if simple engine, cylinder to be not less than 22 inches in diameter, pressure carried on boiler 130 pounds steam; send full detailed information and price by first mail.

Engine and Boiler, etc.—Schlehauf Lumber Co., Carrollton, Ala., wants 25-horse-power engine and boiler, on wheels; also 400 feet slab conveyor chain.

Engines.—See "Electrical Machinery."

Engineering Supplies.—Separate sealed proposals, marked "Proposals for lumber, sand, broken stone, vitrified paving blocks, vitrified sewer pipe, creosoted wood blocks, asphalt blocks, granite paving blocks, American Portland cement (estimated quantity, 25,000 barrels), sidewalk and sewer brick, oils, coal, sewer castings, filler gravel, concrete gravel, road gravel and white-oak keys for general purposes in City Engineer's Department during year 1913," are solicited and will be received, addressed to Board of Awards, care of Richard Gwinn, City Register, at office of City Register, City Hall, Baltimore, Md., until 11 A. M. January 15; bids for each class of material to be enclosed in separate envelopes; certified check on Clearing-house bank, drawn to order of Mayor and City Council of Baltimore, for amount as recited in specifications; specifications and blank proposal sheets can be had at this office on application; bids received for each kind of material above specified, even though bidder cannot furnish all materials named; H. K. McCay, City Engineer.

Felt.—R. C. Lewis, Abilene, Tex., wants prices on deadening felt.

Foundry Equipment, etc.—J. F. Elder, Columbus, Miss., wants description and prices on new and second-hand cupolas and blowers.

Gasoline Engine.—See "Elevator Machinery."

Gasoline Engines.—J. E. Croser, Waiteville, W. Va., wants prices on gasoline engines.

Gasoline Plant.—H. M. Perry, 1102 American Trust Bldg., Birmingham, Ala., wants gasoline machine to manufacture gas for cooking, water heating, etc., for eight-room country dwelling.

Ginning Machinery.—J. D. Rhen, Buford, Tenn., opens bids in about 20 days to install 2-60 saw gin complete.

Hardware, etc.—King Reciling Swing Co., Station C, Memphis, Tenn., wants prices on machine bits and knives, sandpaper, glue, paint, stains, hardware and packing material.

Heating Plant.—A. C. Chisholm, Fort Smith, Ark., wants prices on steam-heating plant.

Hulling (or Threshing) Machinery.—J. L. Dillard, 413 G St. N. E., Washington, D. C., wants prices on hand and power machines for hulling or threshing peas and beans from the field.

Iron Limekilns.—Davant & Davant, Brooksville, Fla., want addresses of manufacturers of iron limekilns.

Knitting Machinery.—Paul Gilreath, Cartersville, Ga., wants data and prices on equipment for knitting mill.

Knitting Machinery.—Charles A. Leon-

ard, American Southern Baptist Mission, Laichowfu, Shantung, China, wants catalogues from American manufacturers of machinery for knitting hosiery and gloves.

Levee.—Bids received at levee board office, Clarksdale, Miss., until 2.30 P. M. January 17 for enlargement of levee sections 69, 70 and 71, about 375,000 cubic yards, and levee sections 13H to 18H, inclusive, about 850,000 cubic yards; information obtainable on application to T. G. Dabney, chief engineer, Clarksdale.

Lighting Fixtures.—Simon Jankowsky, Tulsa, Okla., wants addresses of manufacturers of gas and electric fixtures.

Lighting.—Board of Affairs, J. F. Bedell, secretary, Charleston, W. Va., receives bids until 3.30 P. M. January 20 for street and public lighting for five years; certified check for \$500.

Lime.—See "Plaster and Lime."

Locomotive.—Department of Interior, Washington, D. C. Proposals in duplicate received until 2 P. M. January 27 for furnishing and delivering locomotive and dependencies, carriage free, at Government Hospital for Insane, Washington, D. C., in accordance with specifications, copies of which are obtainable upon application to chief clerk of department; Lewis C. Laylie, assistant secretary.

Lumber.—Proposals received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. January 27 for furnishing lumber;

offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill.; and Commercial Club, Tacoma, Wash. F. C. Boggs, Major, Corps of Engineers, U. S. A., General Purchasing Officer.

Metal-working Machinery.—Cumberland Motor Co. (Henry L. Pitman to be addressed), Pineville, Ky., opens bids about March 1 to install metal-working machinery, including gear-cutting machines, lathes, shapers, screw and drilling machines, spring motors, etc.

Mill Machinery.—J. E. Croser, Waiteville, W. Va., wants prices on French luths.

Merchandise.—Claude R. Horne, Carrollton, Miss., wants catalogues from manufacturers and importers with current price sheets on all lines of merchandise; desires to correspond with manufacturers who consign merchandise; also interested in special catalogues of goods to retail at 5, 10, 25 and 50 cents.

Naval Supplies.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C., opens bids January 21 for miscellaneous lot granite paving blocks, etc., schedule 5100; nine ball-bearing "Atlas" jacks, schedule 5095; 5000 pounds petrolatum, 8000 gallons ferric oxide varnish and 5000 pounds white zinc in oil, schedule 5097; delivery Navy-

der improvement ordinances Nos. 695-C, 696-C, 697-C, 698-C, 700-C, 701-C and 702-C; specifications obtainable and plans examined at office; Walter G. Kirkpatrick, City Engineer.

Paving.—Proposals on blank forms furnished by city and addressed to O. A. Spencer, Commissioner of Public Works, Bradenton, Fla., received until 4 P. M. January 23 for furnishing material, equipment and labor for 37,000 square yards street paving; material to be used either bituminous flush coat surface concrete, asphaltic concrete or asphalt macadam (poured process) paving; also 48,000 linear feet combined curb and gutter; separate bids for paving and curbing; certified check for entire work \$3000, made payable to George B. Wallace, Mayor; each bid for paving separate from curbing and guttering must be accompanied by certified check for \$2000; each bid for curbing and guttering separate from paving accompanied by certified check for \$1000; plans and specifications can be seen at office of H. S. Jaudon Engineering Co., Savannah, Ga., and at office of City Clerk; plans, etc., obtainable by writing engineers, Box 582, Savannah, Ga., and enclosing \$5.

Paving.—City of Fort Worth, Tex., receives bids on or before 9 A. M. January 11 for improvements to North Houston St. from 20th to 25th St., Ellis Ave. from 20th to 25th St. and Clinton Ave. from Central Ave. to 20th St.; specifications, etc., prepared by City Engineer; materials either vitrified brick, Bermudez bituminous concrete or rock asphalt; F. J. Von Zuben, Acting City Engineer.

Paving.—Proposals received at office of Dan C. Smith, Jr., City Secretary, Houston, Tex., until 12 noon January 13 for grading and paving of Louisiana St. in accordance with specifications adopted by City Council, as follows: From intersection with south line of Congress Ave. to intersection with south line of Capitol Ave., creosoted wood block pavement; from intersection with south line of Capitol Ave. to intersection with north line of Pease Ave., Texaco asphalt pavement, and from intersection with north line of Pease Ave. to intersection with north line of Berry Ave., bitulithic pavement; certified check on any bank in Houston for 10 per cent. of cost of constructing said pavement; specifications and all necessary information obtainable upon application at office of F. L. Dormant, City Engineer; H. B. Rice, Mayor.

Pier.—City Council, St. Petersburg, Fla., receives bids until January 23 for constructing pier or roadway from sand fill and breakwater on North Second Ave. eastward into Tampa Bay; construction to be under supervision and according to plans and specifications in office of City Engineer, who will furnish blanks for bids; certified check for \$500; W. F. Divine, City Clerk.

Plaster and Lime.—Florida Rock Co., foot of 15th St., Miami, Fla., wants to correspond (view to agencies) with manufacturers of plaster and lime.

Plumbing.—A. C. Chisholm, Fort Smith, Ark., wants prices on plumbing.

Rails.—Schlehauf Lumber Co., Carrollton, Ala., wants to lease three or four miles 25 to 35-pound rails.

Road Construction.—Bids received until 7 P. M. January 10 by Charles B. Miller, Recorder, Warwood, W. Va., for grading and macadamizing Main St., distance of about 300 linear feet; plans and specifications on file in office of Town Recorder; certified check for \$200; C. H. Dowler, Mayor.

Rope.—U. S. Engineer Office, Wilmington, N. C. Proposals for furnishing manila rope received until 12 M. February 1, then publicly opened. Information on application. H. W. Stickle, Major, Engineers.

Safe, etc.—Noel A. Mitchell, St. Petersburg, Fla., wants prices on safe, vault and other bank fixtures.

Safe, etc.—R. B. Barrett, Lock Box 571, Moundsville, W. Va., wants prices on safe, vault and other bank fixtures.

Safe.—Progressive Building and Loan Association, Georgetown, S. C., wants prices on safe.

Sawmill.—S. W. Hood, Aliceville, Ala., wants 40-horse-power sawmill equipment.

Sawmill.—R. T. Little, care Ore City Company, Ore City, Tex., wants portable sawmill outfit of 15,000 capacity.

Sawmill Feed.—Schlehauf Lumber Co., Carrollton, Ala., wants second-hand steam feed; either Brownlee Twin or eight-inch gun.

Sawmill Machinery.—See "Woodworking Machinery."

Scales.—See "Elevator Machinery."

Sewer Construction.—Mayor and City Council, Decatur, Ala., receive bids at City Hall until 7.30 P. M. January 15 for con-

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blanks and general information relating to this circular (No. 754) obtainable from this office or offices of assistant purchasing agents, 24 State St., New York city; 614 Whitney-Central Bldg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engineer offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, and Commercial Club, Tacoma. F. C. Boggs, Major, Corps of Engineers, U. S. A., General Purchasing Officer.

Lumber.—See "Steel Rods, etc."

Mail Shutes.—Simon Jankowsky, Tulsa, Okla., wants addresses of manufacturers of mail shutes.

Machine Tools.—Planters' Oil Mill & Gin Co., Kosciusko, Miss., wants prices on 16 to 24-inch shaper and small lathe about 12 to 18-inch swing and 10 feet between centers.

Metal, etc.—Proposals received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. January 28, then opened in public, for furnishing steel unloader masts, habbitt metal, pig tin, pig lead, nails, hack-saw blades, 15-ton scales and cotton canvas. Blanks and general information relating to this circular (No. 755) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engineer

yard, Norfolk, Va.; for copies apply to navy pay office nearest navy-yard.

Nut-shelling Plant.—M. Besteiro, Brownsville, Tex., wants prices on power pecan-shelling plant.

Oil Mill Machinery.—R. M. Nowell (and associates), Selma, N. C., will be in market about February 1 for equipment for four-press cottonseed-oil mill.

Packing Material.—See "Hardware, etc."

Paving.—Proposals received at office of Dan C. Smith, City Secretary, Houston, Tex., until 12 noon January 13 for grading and paving Harrisburg Rd. from Milby St. to eastern city limits; five-inch concrete base, covered with naphtha paint coat; two-inch Texaco sheet asphalt surface; certified check 10 per cent. amount of bid; F. L. Dormant, City Engineer.

Paving.—Proposals, addressed to Board of Bond Trustees, W. H. Lyle, chairman, Live Oak, Fla., received until 4 P. M. February 5 for material and labor for about 25,000 square yards street paving (vitrified brick, granite, sheet asphalt and asphaltic concrete considered), with drainage and granite curb; certified check \$2500; plans and specifications at office of consulting engineer, H. S. Jaudon Engineering Co., Box 582, Savannah, Ga., and of C. A. Hardee, secretary of board; specifications obtainable on payment of \$10 to engineers.

Paving.—Proposals received until 10 A. M. January 7, Birmingham, Ala., for construction of certain granite block alley paving un-

struction of certain sanitary sewers; plans and profiles on file at office of City Engineer; H. A. Skeggs, Mayor.

Sewer Construction.—Bids received by N. R. Patterson, Mayor, Pineville, Ky., for constructing 10-inch sewer from William Low's down Cedar St., until January 14; bids must be addressed to F. A. Heath, clerk, and accompanied by bond.

Sewer Construction.—Proposals received at office of Board of Public Works, Louisville, Ky., until 2 P. M. January 17 for sewer letting No. 478: Section 3, 32d St. sewer, contract 7; section 2, Madison St. sewer, contract 6; section 2, Green St. sewer, contract 8; 11th and West Sts., contract 9; 8th, 10th and Madison Sts., contract 10; plans and specifications on file at office of board, and obtainable, with affidavits and bidder's bond, on deposit of \$1; estimated amount of work, 10,940 linear feet 36, 33, 30, 27, 24, 20, 18 and 15-inch sewer, with 250 vertical feet manholes.

Sewers.—Board of Public Affairs, Little Rock, Ark., receives bids until noon January 29 for constructing sewer mains and laterals in blocks 4, 5 and 6, Deaf Mute section; certified check for \$100; also for constructing sewer mains and laterals in blocks 160 and 161, old city; blocks 401, 402, 403, 404, 405, 406, 407 and 408, Lincoln & Zimmerman's addition; block 6, Fulk's addition; certified check for \$250; plans and specifications on file in office of superintendent of public works; Fred A. Isgrig, clerk.

Sewer Construction.—Bids received by Board of Commissioners, Huntington, W. Va., until 1.30 P. M. January 30, Eastern time, for construction of 12 and 15-inch laterals on 1st, Hagan and Smith Sts., Second Ave., and on alley; certified check \$500; plans and specifications with A. B. Maupin, City Engineer; L. A. Pollock, Commissioner of Streets, etc.

Sewer Construction.—Baltimore (Md.) Board of Awards receives bids until 11 A. M. January 22 to construct sanitary lateral sewers in district No. 8, sanitary contract No. 107, as shown on plans on file with Calvin W. Hendrick, chief engineer Sewerage Commission; specifications and plans obtainable at office of Secretary Sewerage Commission, 904 American Bldg.; charge of \$10 for each set of specifications and blueprints; certified check \$3500; approximate quantities, 35,000 linear feet vitrified pipe house connections and 39,000 linear feet vitrified pipe sewer, 8 to 24 inches diameter; Charles England, chairman Sewerage Commission.

Sewer Construction.—Passaic Valley Sewerage Commissioners have designated February 4 at 2 P. M. when they will meet in Essex Building, Clinton St., Newark, N. J., to receive proposals in writing for construction of section 7 of main intercepting sewer in compressed-air tunnel. Approximate quantities, section 7: Item 1, excavation in earth, rock, or earth and rock together, in compressed-air tunnel, for 135-inch circular concrete sewer, and all appurtenant work, 4930 linear feet; item 2, excavation in earth, rock, or earth and rock together, in compressed-air tunnel, for 141-inch circular concrete sewer, and all appurtenant work, \$890 linear feet; item 3, concrete masonry, in compressed-air tunnels and shafts, made with Portland cement mortar, and including all appurtenant work, 30,000 cubic yards; item 4, brick masonry, in shaft manholes, laid with Portland cement mortar, and all appurtenant work, 300 cubic yards; drawings, form of contract and specifications and blank form for proposal obtainable at the commissioners' office from William M. Brown, chief engineer.

Sewer Construction Equipment and Materials.—Erwin Cahow, Arcadia, Fla., is interested in trenching machines, sewer jacks, pumps, etc., for sewer construction; also wants 10 siphons or flush valves.

Shingles.—G. W. Stephens, 1041 Westfall Ave., San Antonio, Tex., wants prices on tin and asbestos shingles.

Soap Machinery.—G. K. Sinclair, Jr., Hampton, Va., wants information on process of soapmaking and prices on machinery.

Store Front.—M. C. Daugherty, Angleton, Tex., wants prices on galvanized store front; plate glass 10x7½ feet, balance double strength; height of front 12 feet; galvanized work 10 feet.

Tiling.—Simon Jankowsky, Tulsa, Okla., wants addresses of manufacturers of tiling for corridors and base of such.

Vacuum Cleaner.—A. C. Chisholm, Fort Smith, Ark., wants prices on vacuum cleaner.

Venetian Shades.—Simon Jankowsky, Tulsa, Okla., wants addresses of manufacturers of Venetian shades.

Water-wheels.—R. B. Stuart, Kernersville, N. C., wants addresses of manufacturers of steel overshoot water-wheels.

Well-drilling.—Bliss Petroleum Co.,

Bliss, Okla., opens bids January 15 to drill oil wells.

Well-drilling and Equipment.—Few Acres Oil & Gas Co., R. J. Bell, secretary-treasurer, 204 Westfall Bldg., Oklahoma City, Okla., opens bids March 1 for drilling oil wells and installing equipment complete; wants prices f. o. b. Ardmore, Okla., on Keystone or Parkersburg rig and drilling outfit, capable of drilling 2500 feet, including new or second-hand casing (for which prices are wanted at once), 700 feet 10-inch, 900 feet 8¼-inch, 1200 feet 6½-inch and 300 feet 12-inch drive pipe; 1200 feet seven-eighths Roebbling wire line, 1200 feet three-inch manila cable, 25-horse-power portable boiler, 25-horse-power Ajax engine complete, 2000 feet two-inch gas line, 1000 feet one-inch water line and other accessories.

Wharf.—Bids received by Board of Commissioners of Port of New Orleans, 200 New Orleans Court Bldg., New Orleans, La., until January 22 at 7.30 P. M. for constructing Pauline St. wharf, materials for which will be furnished by board; \$1000 deposit or certified check; plans and specifications, etc., on file in office of engineer, A. C. Bell, 200 New Orleans Court Bldg., by whom full sets will be furnished on deposit of \$15; William A. Kernaghan, president.

Woodworking Machinery.—Joseph Hoopes, Denbigh, Va., wants prices on machinery to develop dogwood timber, from six to four inches on stump; also beech timber.

Woodworking Machinery.—G. W. Stephens, 1041 Westfall Ave., San Antonio, Tex., wants prices on woodworking machinery.

Woodworking Machinery.—High Point Bending & Chair Co., Siler City, N. C., wants second-hand jointer, with pinch safety head, guaranteed; also modern design single surfacer, with sectional roll and chip breaker in one-inch sections, cylinder from 24 to 30 inches (Whitney or Buss preferred; would consider other makes).

Woodworking Machinery.—Automatic Threading Shuttle Manufacturing Co., W. H. Portner, president, Gadsden, Ala., wants to correspond with manufacturers of shuttle-making machines.

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS RECORD, Baltimore, Md., January 8.

There was considerable activity in the Baltimore stock market during the past week, and the trading showed sales as follows: United Railways common, 25 to 23, with last sale at 23½; do. incomes, 63 to 62, with last sale at 62½; do. funding 5s, 89¼ to 86¾, with last sale at 87; do. 4s, 84 to 83¾; United Electric Light & Power 4½s, 82½; Consolidated Gas, Electric Light & Power common, 111½ to 112; do. preferred, 113 to 116; do. 4½s, 87¼; do. notes, 99¾; Consolidated Gas 4½s, 95 to 94¾; Seaboard Air Line common, 19; Mt. Vernon-Woodberry Cotton Duck 5s, 74¾ to 74; G. B. S. Brewing 4s, 46.

Bank stock sold as follows: Merchants-Mechanics, 30 to 32; Citizens', 228; Maryland, 24½ to 22; Citizens', 43; Union, 135¼; First National, 145; Western, 39½ to 40; Marine, 43½.

American Bonding sold from 78 to 91, with last sale at 90¼; Fidelity & Deposit, 150 to 175, with last sale at 174; Maryland Trust preferred, 120; Munsey Trust, 104; United States Fidelity, 180 to 182¾; Mercantile Trust, 153 to 154; Maryland Casualty, 105½.

Other securities were traded in thus: Fairmont & Clarksburg Traction 5s, 100½ to 101; Georgia Southern & Florida 5s, 105¼; Georgia, Carolina & Northern 5s, 105½ to 105½; Houston Oil common, trust certificates, 17¼ to 19½; do. preferred, trust certificates, 65 to 67½; do. dividend certificates, 83; Northern Central Railway stock, 123 to 120; Atlantic Coast Line rights, 3 to 3¼; New Orleans, Mobile & Chicago 5s, 86½ to 86½; Pennsylvania Water & Power common, 68½ to 67½, with last sale at 67¾; Washington, Baltimore & Annapolis 5s, 88 to 87½; Baltimore, Sparrows Point & Chesapeake 4½s, 96 to 95¼; Baltimore City 4s, 195½, 96½; do. 3½s, 1940, 89; do. 1945, 89; do. 4s, 1957, 96¼; do. 1926, 100, do. 5s, 1916, 101¾; do. 4s, 1961, 96½ to 96¼; Minneapolis & St. Paul joint 5s, 103½ to 103¾; Atlantic Coast Line of Connecticut, 260; Norfolk & Atlantic Terminal 5s, 92¼ to 93½; Consolidation Coal refunding 5s, 92¼ to 92½; Jacksonville (Fla.) Water 5s, 1924, 104; Macon Railway & Light 5s, 98½ to 98¾; Chicago Railways 5s, 99¼ to 99½; Mary-

land 4s, 1928, 98; Milwaukee Electric 4½s, 93½; Norfolk & Portsmouth Traction 5s, 91½ to 92; Anacostia & Potomac 5s, 90¼ to 90; Atlanta Consolidated Street Railway 5s, 104¾; Baltimore Electric 5s, stamped, 97 to 96½; Georgia & Alabama Consolidated 5s, 104¾ to 105; Maryland 3½s, 1914-1919, 97; German Fire Insurance, 19; Detroit United 4½s, 74¾; Maryland Electric 5s, 97¾; Portland Railway 1st and refunding 5s, 101; City & Suburban 5s, 103½; Consolidation Coal, 100½ to 102; Danville Traction & Power 5s, 93½; Knoxville Traction 5s, 105; Norfolk Street Railway 5s, 107; Virginia Midland 5th, 105½ to 104½; Atlantic Coast Line 4s, certificates, 84¾; Anacostia & Potomac 5s, guaranteed, 100; Maryland 3½s, 1926, 92¼; Atlantic Coast Line of Connecticut 5-20s, 90; Coal & Coke Railway 5s, 94¾; Metropolitan (Washington) 5s, 104½; Northern Central 5s, A, 108¼; International & Great Northern Corporation, 65; Virginia Railway & Power 5s, 95; Fairmont Coal 5s, 96 to 96¼; South Bound 5s, 107½; Newport News & Old Point 5s, 98; Baltimore & Ohio Railroad stock, 105½; Milwaukee refunding 4½s, 44.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended January 8, 1913.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast Line.....	100	121¼	121½
At. Coast of Conn.....	100	261	262½
Maryland & Pennsylvania.....	100	42	42
Norfolk Railway & Light.....	25	26¼	26½
Seaboard Comm.....	100	18½	19
United Rys. & Elec. Co.....	50	23½	24

Bank Stocks.	Par.	Bid.	Asked.
Bank of Baltimore.....	100	164	165½
Bank of Commerce.....	15	32	32
Citizens'.....	10	41½	44
Drovers' & Mechanics.....	100	222½	223
Farmers' & Merchants.....	40	48½	51
First National.....	100	144	146
Howard.....	10	13¾	14
Marine.....	20	43	43
Maryland.....	20	21¾	22
Merchants-Mechanics.....	10	31½	31¾
Western.....	20	39	39½

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding.....	25	90¼	91
Baltimore Trust.....	100	155	155
Colonial Trust.....	50	28½	28¾
Continental Trust.....	100	213	213
Fidelity & Deposit.....	50	174	174
Finance & Trust Pfd.....	100	100	100
Fidelity Trust.....	100	235	245
Manufacturers' Finance Com.....	100	150	165
Manufacturers' Finance Pfd.....	100	101	101
Maryland Trust.....	100	119	122
Maryland Trust.....	100	119	125
Maryland Casualty.....	25	101	101
Merc. Trust & Dep.....	50	153½	154
Security Stor. & Tr.....	100	154½	170
U. S. Fidelity & Guaranty.....	100	183	183

Miscellaneous Stocks.	Par.	Bid.	Asked.
Baltimore Electric Pfd.....	43	90	91
Con. Gas, Elec. Lt. & P. Com.....	100	112	114
Con. Gas, Elec. Lt. & P. Pfd.....	100	115	118
Canton Company.....	100	136	136
Consolidation Coal.....	100	101¾	102½
Mer. & Min. Trans. Co. V. T.....	100	60	75

Railroad Bonds.	Par.	Bid.	Asked.
Atlantic Coast 1st 4s.....	100	95½	95½
At. Coast Conv. Deben. 4s.....	100	99½	99½
At. Coast Conv. 4s, C. & F., 5-20s.....	100	103	104¼
Baltimore & Harrisburg 5s.....	100	104	104¼
Charleston & West. Car. 5s.....	100	94½	94½
Coal & Coke Railway 5s.....	100	94½	94½
Coal & Iron Railway 5s.....	100	101	101
Col. & Green. 1st 6s.....	100	104	104
Florida Cent. & Pen. 5s.....	100	101½	101½
Georgia & Alabama 5s.....	100	104½	105½
Georgia & Florida 5s.....	100	65	65
Georgia, Car. & North. 1st 5s.....	100	105¼	105½
Georgia Pacific 1st 6s.....	100	110	110
Georgia South. & Fla. 1st 5s.....	100	105¼	105½
New Orleans Great North. 5s.....	100	65½	65½
Norfolk & Carolina 5s.....	100	110	110
New Orleans, M. & C. 5s.....	100	86½	86½
Potomac Valley 1st 5s.....	100	106	106
Raleigh & Gaston 5s.....	100	107½	109
Seaboard Adjustment 5s.....	100	76¼	76¼
Seaboard & Roanoke 5s.....	100	104½	104½
South Bound 5s.....	100	107¼	107½
Virginia Midland 5th 5s.....	100	105	105¼
Wash., Balto. & Annap. 5s.....	100	87½	87½
Western Maryland 5s.....	100	81½	84
Western N. C. Con. 6s.....	100	101½	102¼
Wilmington & Weldon 4s.....	100	95½	96

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s.....	100	98½	99½
Anacostia & Potomac 5s, Gtd.....	100	100	101
Atlanta Con. St. Ry. 5s.....	100	104¾	104¾
Balto., Sp. Pt. & C. 4½s.....	100	94¾	96
Birmingham Railway 4½s.....	100	90	91
Charleston City Railway 5s.....	100	103½	103½
Charleston Con. Electric 5s.....	100	97	98
City & Suburban 5s (Balto.).....	100	100¾	100¾
City & Suburban 5s (Wash.).....	100	103	103
Fairmont & Clarksburg Trac. 5s.....	100	100¾	101
Knoxville Traction 5s.....	100	101¾	104¾
Norfolk Railway & Light 5s.....	100	98½	99
Maryland Electric Railways 5s.....	100	97½	97¾
Metropolitan 5s (Wash.).....	100	104½	105¼
Newport News & O. P. G. M. 5s.....	100	79	79
Norfolk & Portsmouth Traction 5s.....	100	91½	92
Norfolk Street Railway 5s.....	100	105½	106¾
United Railways 1st 4s.....	100	83½	84
United Railways Income 4s.....	100	62½	62½
United Railways Funding 5s.....	100	86½	87½
United Railways Notes.....	100	102	104
Virginia R. & P. 5s.....	100	94½	95½

Miscellaneous Bonds.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron 5s.....	100	72½	73
Baltimore Brick 5s.....	100	83½	83½
Baltimore Electric 5s, 8th.....	100	95¼	96½
Consolidated Gas 4½s.....	100	107¾	107¾
Consolidated Gas 4½s.....	100	91¾	95
Con. Gas, Elec. Lt. & P. 4½s.....	100	87	87½
Consolidation Coal Ref. 5s.....	100	92½	93¼
Fairmont Coal 1st 5s.....	100	96	96¼
G. B. S. Brewing 1st 4s.....	100	45	49½

Maryland Steel Co. 5s.....	98	100
Mt. Vernon-Woodberry Cot. Duck 5s.....	74	74½
Penna. Water & Power 5s.....	92	93¼
Reynolds Park E. & W. 5s.....	101	101
United Elec. Lt. & P. 4½s.....	92½	93

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending January 6.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	79	75
Aiken Mfg. Co. (S. C.).....	55	55
American Spinning Co. (S. C.).....	162	162
Anderson Cotton Mills (S. C.).....	48	48
Anderson Cot. Mills (S. C.) Pfd.....	100	100
Arcadia Mills (S. C.).....	90	90
Arkwright Cotton Mills (S. C.).....	99	100
Belton Mills (S. C.).....	100	110
Brandon Mills (S. C.).....	90	90
Brogan Mills (S. C.).....	60	60
Chiquola Mfg. Co. (S. C.).....	160	160
Clifton Mfg. Co. (S. C.) Pfd.....	97	97
Clinton Cotton Mills (S. C.).....	120	120
Courtney Mfg. Co. (S. C.).....	93	93
Dallas Mfg. Co. (S. C.).....	99	99
D. E. Converse Co. (S. C.).....	75	75
Drayton Mills (S. C.).....	90	90
Eagle & Phenix Mills (Ga.).....	106	106
Easley Cotton Mills (S. C.).....	162	175
Enore Mfg. Co. (S. C.).....	25	62
Enore Mfg. Co. (S. C.) Pfd.....	85	100
Gaffney Mfg. Co. (S. C.).....	72	75
Gainesville Cotton Mills (Ga.).....	72	80
Greenwood Cotton Mills (S. C.).....	100	100
Greenville Mfg. Co. (S. C.).....	135	145
Greenwood Cotton Mills (S. C.).....	57	59
Grendel Mills (S. C.).....	160	160
Hartselle Cotton Mill (S. C.).....	160	160
Henrietta Mills (N. C.).....	160	175
Inman Mills (S. C.).....	100	100
King Mfg. Co. J. P. (Ga.).....	80	85
Lancaster Cotton Mills (S. C.).....	130	130
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	75	75
Laurens Mills (S. C.).....	125	125
Limestone Mills (S. C.).....	155	160
Lockhart Mills (S. C.).....	60	60
Lockhart Mills (S. C.) Pfd.....	95	95
Loray Cotton Mills (S. C.) Pfd.....	90	90
Marble Cotton Mills (S. C.).....	75	75
Mills Mfg. Co. (S. C.).....	90	102
Monahan Mfg. Co. (S. C.).....	90	90
Monahan Mills (S. C.).....	100	100
Monarch Cotton Mills (S. C.).....	105	105
Newberry Cotton Mills (S. C.).....	125	130
Ninety-Six Cotton Mills (S. C.).....	139	139
Norris Cotton Mills (S. C.).....	115	115
Orr Cotton Mills (S. C.).....	90	90
Pacolet Mfg. Co. (S. C.).....	94	94
Pacolet Mfg. Co. (S. C.) Pfd.....	95	100
Parker Common.....	20	20
Parker Pfd.....	63	63
Pelzer Mfg. Co. (S. C.).....	120	120
Poe Mfg. Co. F. W. (S. C.).....	102	102
Saxon Mills (S. C.).....	130	130
Spartan Mills (S. C.).....	119	125
Trion Mfg. Co. (Ga.).....	130	130
Tupacum Mills (S. C.).....	390	390
Union-Buffalo (S. C.) 1st Pfd.....	60	60
Union-Buffalo (S. C.) 2d Pfd.....	35	35
Victor Mfg. Co. (S. C.).....	110	115
Warren Mfg. Co. (S. C.).....	80	90
Warren Mfg. Co. (S. C.) Pfd.....	100	105
Washington Mills (Va.).....	28	28
Washington Mills (Va.) Pfd.....	106	110
Whitney Mfg. Co. (S. C.).....	119	119
Wiscasset Mills (N. C.).....	135	135
Woodruff Cotton Mills (S. C.).....	95	100
Woodside Cotton Mills (S. C.).....	100	100
Watts Mills (S. C.).....	70	70
Williamson Mills (S. C.).....	129	125

vided surplus (chargeable with nine months' interest) is \$1,306,824.67. The number of accounts open is 45,021, a net increase of 139 during the year. Wm. M. Hayden is president and Frank G. Evans treasurer.

The Central Savings Bank has \$10,737,800.97 of funds on hand, an increase of practically \$225,000 as compared with a year ago. Operations totaled \$14,469,533.13. Receipts from depositors were \$3,477,812.13, and the payments to depositors (including interest) were \$3,622,924.91. The bank has bonds valued at \$6,720,252.50 and mortgage loans of \$2,422,045. Cash on hand amounts to \$575,111.05. The amount due to depositors (including interest credited December 31) is \$9,817,708.47, the guarantee fund is \$920,092.50 and the excess of assets over liabilities at market value is \$1,050,902.50. The number of accounts open is 21,532, a net decrease of 34 as compared with a year ago. R. K. Waring is president and J. Wilson Cole treasurer.

The Provident Savings Bank has funds on hand amounting to \$5,858,192.23, which shows an increase of \$392,127.96 as compared with the previous year. The total of operations was \$9,446,104.41. There was received from depositors during the year \$3,726,900.24, and there was paid to them (including interest) \$3,515,355.55. The bank owns stock and bonds valued at \$3,171,997.45, and it has loans on mortgages of \$2,153,106. Cash on hand is \$128,646.43. The amount due to depositors is \$5,561,808.10. The guarantee fund and undivided surplus (which is chargeable with nine months' interest) is \$296,384.13. There are 55,254 accounts open, a net increase of 2033 during the year. Elisha Perkins is president and G. Herbert Boehm treasurer.

Mercantile Trust's Year.

The annual report of the Mercantile Trust & Deposit Co. of Baltimore indicates that the year 1912 was a very prosperous one for that corporation. Evidence of growth is shown in all of its departments.

The financial statement, published elsewhere in this issue, has just been audited by the annual committee of stockholders, and contains the following figures: Capital, \$1,500,000; surplus and undivided profits, \$3,177,220; deposits, \$9,132,372, and cash on hand, \$1,836,645.

The Mercantile has issued a leaflet on "Money: Where and How to Keep It," which is the forerunner of a series of short financial articles to be published during the year. Names of persons who would like to receive the series will be placed on the mailing list upon application.

FINANCIAL CORPORATIONS.

Ala., Arlton.—The People's Bank, capital \$25,000, is reported to have begun business. E. E. Paulk, president, and B. L. Johnson, cashier.

Ala., Birmingham.—Official: The Ensley Mortgage & Realty Co. incorporated; capital \$8000, with \$2100 paid in; A. C. Ricks, president and treasurer; J. G. Braswell, vice-president, and John M. Martin, secretary. Business began December 15, 1912.

Ala., Birmingham.—The Alabama Security Co., capital \$4000, is reported to have filed articles of incorporation. The stockholders are J. W. Blankenship, C. E. Edwards, N. D. Keith, J. S. Keith and T. L. Waggoner.

Ala., Geneva.—The Farmers' National Bank of Geneva is reported chartered; capital \$50,000. C. A. O'Neal is president and Fred C. Riley cashier.

Ala., Crossville.—The First Bank of Crossville is reported organized with \$30,000 capital. Ulay W. Black of Georgiana will be president.

Ala., Decatur.—A new bank capitalized at \$250,000 is reported being organized by John B. Weakley and associates of Birmingham.

Ala., Fayette.—C. A. Beasley and others are reported organizing a new bank.

Ala., Talladega.—The Talladega Insurance & Investment Co., capital \$10,000, is reported incorporated by H. F. McElderry, H. L. McElderry and Miss Grace Jemison.

Ark., Glenwood.—The Bank of Glenwood, formerly a branch of the Bank of Amity, is reported to have begun business; capital \$25,000.

Ark., Newport.—Official: The Jackson County Abstract & Guaranty Co. of Newport incorporated and chartered; capital \$5000. A. W. Estes, president, and George Vaughan, vice-president, Little Rock, Ark.; M. D. Kinkade, secretary-treasurer, Newport, Ark. Business began January 1, 1913.

Ark., Ratcliff.—The Bank of Ratcliff is reported to have filed articles of incorporation.

Fla., Baker.—The Bank of Baker, capital \$15,000, is reported organized with T. F. West, president; A. B. Morris, vice-president, and J. A. Hart, cashier.

Fla., Jacksonville.—The Promoters' Investment Co. is reported chartered; capital \$100,000. Directors, George M. Boyd, president; J. L. Hobbs, vice-president; McGregor Nesbitt, secretary and treasurer; F. P. Fleming and John E. Boyd.

Fla., Jacksonville.—The United States Trust and Savings Bank is reported to have begun business. James J. Logan is president; Rolands B. Uedemann, assistant cashier, and Walter Mucklow, trust officer.

Fla., Kissimmee.—Arthur E. Donegan, president, and W. A. Smith, secretary and treasurer, of the South Florida Lumber Co., just organized, will incorporate a building and loan department.

Fla., St. Petersburg.—Noel A. Mitchell, who will be president, confirms report that a new bank is being organized; capital to be about \$50,000.

Ga., Atlanta.—The Union Trust Co. is being organized by E. J. Sprattling, George Gordon, H. W. Dillin, Charles F. Stone, Remsen P. King and Charlton G. Ogburn of Atlanta, Ga., and Henry Leeds of New York city. Stevens & Ogburn are attorneys. Business is expected to begin about March 1 with offices in the Third National Bank Bldg.

Ga., Rome.—Official: The Exchange National Bank of Rome, 226 Broad St., which succeeds the Exchange Bank, is organized with \$150,000 capital paid in and \$300,000 surplus; directors, J. A. Glover, president; T. G. Simpson, vice-president; W. W. Berry, cashier; Simpson Denney, teller; Joe P. Glover and J. B. Sullivan. Business began January 1.

Ga., Rome.—The National City Bank has begun business. John M. Graham is president.

Ga., Savannah.—Official: The Realty Bond & Mortgage Co. incorporated; capital \$10,000. George H. Miller and Samuel K. Platshek, incorporators. Business is to begin this month.

Ga., Savannah.—Reported chartered: The Realty, Bond & Mortgage Co.; capital \$100,000. S. K. Platshek and G. H. Miller are members of the firm.

La., New Orleans.—Barreda Turner is reported organizing a new loan company.

La., New Orleans.—The Southern Cities Corporation is reported organized with \$1,000,000 capital; temporary officers: R. L. Riley, president; I. B. Rennyson, vice-president; A. Spitzfaden, secretary; T. P. Bell, treasurer.

La., New Orleans.—The Banking Trust Co., 206 Carondelet St., is reported to have begun business; capital \$1,250,000; directors, R. H. Downman, W. Morgan Gurley, Ovide La Cour, Johnston Armstrong, R. F. Broussard, William Pfaff, Jules M. Burgulieres, W. N. Grunewald, John May, Eugene A. Pharr, R. N. Sims, A. P. Pujol, Arthur B. La Cour.

Md., Baltimore.—The People's Savings and Loan Association, capital \$130,000, is incorporated by Nicholas B. Simpson, John Welch and Louis Kraeger.

Miss., Hattiesburg.—The Hub Insurance Co., capital \$10,000, is reported incorporated by C. O. Eure, F. J. Duke and J. E. Davis.

Md., Govanstown.—The new Bank of Govanstown, capital \$25,000, which takes the place of the Suburban Trust & Building Co., is reported to have begun business with directors thus: Jacob H. Parr, president; Andrew Hilgartner, vice-president; Robert S. Mooney and Eugene Pennington of the Equitable Mortgage & Trust Co.; Leroy M. Carter, Roland R. Marchant, W. J. Dilworth, Jacob Aull, Hugh J. Gallagher, Lewis E. Jones and H. H. Medinger. Cashier not yet elected.

Md., Salisbury.—The Mardella Springs Trust Co. is reported to have begun business; capital \$12,500. Robert G. Robertson

is president and William H. Robertson, cashier.

Mo., Springfield.—The State Savings Bank of Springfield is reported incorporated with \$100,000 capital. Shareholders and directors are E. L. Ferguson, L. A. Seaman, Edgar P. Mann, C. A. Clement, M. D. Lightfoot, Louis S. Meyer, J. L. Hines, James H. Keet, Joel H. Roundtree and Milton C. Baker.

Mo., Springfield.—The Southern Missouri Trust Co. is reported to have filed articles of incorporation; capital \$200,000. W. M. Wade will be president; Jesse A. Tolerton, secretary and treasurer; L. E. Shattuck, manager of realty department; G. M. Seebree, attorney. These men, with W. F. Garrett, E. D. Levy, W. T. Tyler, Dr. B. F. Fortner and Major George H. McCann, comprise the directors.

Mo., St. Louis.—The Industrial Loan Co. of St. Louis, capital \$200,000, is reported to have begun business with offices in the Liggett Bldg., 728 Chestnut St. James G. Butler is president and Arthur A. Blumeyer, 3405 Shendoah Ave., cashier. Executive committee: Colonel Butler, ex-officio; W. J. Kinsella, chairman; F. B. Elsemann and W. W. Hoxton. Other directors are: Paul Brown, W. F. Carter, Henry L. Cornet, T. S. Garnett, Jr., Oscar Johnson, George D. Markham, A. L. Shapleigh, M. L. Wilkinson and Thomas Wright.

N. C., Calypso.—The Bank of Calypso is reported chartered. Incorporators, S. L. Warren, D. A. Cameron and others.

N. C., Goldston.—Bank of Goldston is reported chartered with an authorized capital of \$50,000 by Hugh Womble and others.

N. C., Greenville.—The Greenville Building and Loan Association is reported being organized by J. W. Norwood and Col. Wm. F. Robertson.

N. C., Southport.—The Southport Investment & Promoting Co., authorized capital \$50,000, is reported incorporated by W. H. Pyke, J. Arthur Doshier and J. Berg.

Okla., Henryetta.—The Miners' National Bank of Henryetta is reported being organized with \$25,000 capital. Directors: John Smith, correspondent, Henryetta; M. G. Young, W. T. Wisdom, J. B. Swan and C. H. Kellogg.

Okla., Tecumseh.—Reported chartered: Tecumseh National Bank; capital \$25,000; E. L. Rosebush, president; M. H. Wagner, cashier. This succeeds the Tecumseh State Bank.

S. C., Columbia.—The Carolina Bond & Mortgage Co. is reported to have been granted a commission; capital \$250,000. Petitioners: H. A. Kohler, New York; J. L. Minnaugh, T. B. Stackhouse, Joseph Norwood, W. J. Murray, Charles H. Barron and L. M. Hawkins, Columbia; J. L. Minnaugh, president; H. A. Kohler, vice-president; L. M. Hawkins, secretary and treasurer, Americus, Ga.; Barron, Moore, Barron & McKay, general counsel, Columbia.

S. C., Columbia.—The Carolina-Georgia Investment Co. incorporated; capital \$6000; organizers, B. F. Taylor, W. C. Fripp and Washington Clark. Business has begun.

S. C., Fairfax.—The Fairfax Insurance Co. is reported to have been granted a commission; capital \$2000; petitioners, F. M. Young, E. L. Young, J. F. Lightsey and W. M. Lightsey.

S. C., Georgetown.—The Progressive Building and Loan Association, capital \$25,000, will begin business January 14; directors, J. B. Brockington, president; J. J. Burton, vice-president; Geo. W. Howard, secretary and treasurer; J. B. Beck, A. A. Allston, S. S. Brinnston, R. J. Brown, F. T. Jones, Crisp Atkinson, R. B. Anderson, Jr., and Sampson Dunmore.

S. C., Holly Hill.—The Farmers and Merchants' Bank of Holly Hill is reported to have begun business; capital \$15,000; directors, H. M. Heesman, William Jeffers, S. J. McCoy, J. T. Russell, H. E. Moore, John W. Hart, L. A. Carson. Mr. Carson is president, Mr. Jeffers vice-president, Mr. McCoy cashier, and Mr. James M. Russell assistant cashier.

S. C., Spartanburg.—A. W. Law & Co. announce the incorporation of their business with a capital stock of \$50,000 for conducting an investment, banking, insurance and stock and bond business. A. M. Law, president; L. F. Cannon, treasurer.

Tenn., Chattanooga.—The Real Estate Investment Co. is reported to have made application for a charter; capital \$7000. Incorporators: Righter Cogswell, Stanley Lochman, Gordon Wood, Earl N. Webster, Junius D. Norton, Corbin Woodward and H. B. Sadd.

Tenn., Chattanooga.—The Real Estate Investment Co., capital \$7000, is reported in-

corporated by Stanley Lochman, Gordon Wood, J. D. Norton, G. Woodward, Earle N. Wester, Gigher Cogswell and H. B. Sadd.

Tenn., Chattanooga.—The Chattanooga Title Co., capital \$250,000, is reported incorporated by G. D. Lancaster, A. R. McKenzie, S. M. Chambliss, Frank Spurlock, H. Bushnell, M. M. Allison, C. E. James, W. B. Swaney and F. Geddings.

Tenn., Covington.—The Union Savings Bank, capital \$30,000, is reported organized with the following officers: Dr. G. B. Gillespie, former president of the Farmers' Union Bank, president; W. M. Simonton and G. D. Green, vice-presidents; G. G. Harvey, Jr., cashier, and S. C. Shelton, assistant cashier.

Tenn., Petersburg.—The First National Bank is reported being organized; capital \$30,000. F. S. McTady is president and O. F. Gill cashier. This succeeds the Bank of Petersburg.

Tex., Austin.—The Farmers' Co-operative Insurance Association now organizing is reported to have elected H. L. Hill temporary chairman and H. F. Kruger temporary secretary.

Tex., Brownwood.—The Abstract & Title Co. of Brownwood, capital \$10,000, is reported incorporated by B. E. Hurlbut, Sr., Bert E. Hurlbut, Jr., R. D. McClelland.

Tex., Brownwood.—The Abstract & Title Co. of Brownwood, capital \$10,000, is reported incorporated by B. E. Hurlbut, Sr., Bert E. Hurlbut, Jr., and R. D. McClelland.

Tex., Chandler.—The Citizens' Guaranty State Bank is reported organized with \$25,000 capital. Business is expected to begin about January 10.

Tex., Dallas.—The Rex Investment Co. of Dallas, capital \$10,000, is reported chartered. Incorporators: C. W. Starling, Gilbert H. Irish, Lee I. Starling.

Tex., El Paso.—The American Trust and Savings Bank, which succeeds the American National Bank, is reported to have begun business; capital \$200,000; Joshua S. Raynolds is president; James G. McNary, J. M. Wyatt and J. F. Primm vice-presidents.

Tex., Navasota.—Official: The Farmers' State Guaranty Bank of Navasota chartered; capital \$50,000; directors, J. H. Neal, president; J. T. Barry, vice-president; J. T. Evans, acting vice-president; G. C. Stoneham, John A. McKay, Wm. Gardner, J. F. W. Roehling, R. L. Renick is cashier. Business is to begin about January 20.

Tex., San Antonio.—Reported chartered: The Citizens' Bank & Trust Co., capital \$100,000; incorporators, S. P. Skinner, W. A. Wurzbach, Sidney Turner, Joseph Rosenfield and E. E. Sawyer.

Tex., Rogers.—The Farmers' State Bank of Rogers is reported chartered; capital \$25,000; incorporators, W. C. Cook, H. L. Skinner and J. M. Sampson.

Va., Fredericksburg.—Local citizens are reported to be organizing a new bank. R. Conway Vance is said to be interested.

Va., Portsmouth.—The Mercantile Insurance & Investment Corporation, capital \$1000 to \$10,000, is reported incorporated. Emil Hauser, president; J. G. Mengel, secretary and treasurer, Norfolk, Va.; J. C. Kaufman, vice-president, Portsmouth, Va.

Va., Pulaski.—The Peoples' Insurance & Realty Co., capital \$5000 to \$15,000, is reported incorporated. W. L. McGavock, president; A. T. Estridge, Jr., vice-president; H. W. Thaxton, secretary and treasurer.

W. Va., Charleston.—The Union National Bank of Charleston is reported being organized with \$25,000 capital. S. A. Moore, correspondent, Charleston, W. Va.; Samuel Stephenson, A. L. Ruffner, G. A. MacQueen, Charles Eward and T. B. Enslow, directors.

NEW SECURITIES.

Ala., Aliceville.—Official: The Endowment Bank Knights of Pythias has purchased, at par, \$11,000 of 6 per cent. 10-year school building bonds; denomination \$500; dated March 1, 1913; maturity March 1, 1923. W. D. Boyles is Mayor.

Ala., Birmingham.—Ladenburg, Thalmann & Co., New York, are reported to have purchased \$100,000 of 4½ per cent. 50-year Jefferson county hospital bonds at 100.2731.

Ala., Louisville.—Reported voted: \$10,000 of school and \$5000 of water-works bonds.

Ala., Mobile.—The City Bank & Trust Co. of Mobile is reported to have been awarded at \$115.20 premium the \$72,000 of 5 per cent. 10-year municipal bonds. Laz. Schwarz is Mayor.

[For Additional Financial News, See Pages 70 and 71.]

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JNO. B. RAMSAY, V.-P. and Chm. Bd. of Dir.
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Surplus and Profits \$2,175,000

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Wm. S. Hammond, Cashier
Saml. W. Tschudi, A. Cash. R. E. Bolling, A. Cash.**The First National Bank**
17 South St., Baltimore, Md.Capital - - - - \$1,000,000
Surplus and Net Profits - - 400,000
Deposits - - - - 6,500,000

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Capital, \$1,000,000

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OFFICERSWALDO NEWCOMER, President.
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R. VINTON LANSDALE, Cashier.
C. G. MORGAN, Asst. Cashier.

Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited.

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Baltimore City Stocks.....	\$2,554,847.47
Other Stocks and Bonds.....	3,453,771.33
Loans on Approved Collateral:	
Time.....	\$1,714,567.43
Call.....	3,797,265.26
	5,421,832.69
Office Building and Lot.....	380,000.00
Unsettled Open Bond Accounts,	
etc. (Secured).....	168,775.18
Cash in Hand and in Banks.....	1,836,645.91
	\$12,815,871.68

LIABILITIES.

Capital Stock.....	\$1,500,000.00
Surplus.....	2,709,000.00
Undivided Profits.....	477,230.86
Deposits:	
Subject to check.....	\$6,545,026.16
Time.....	2,340,836.89
In Trust.....	246,509.19
	9,132,372.15
Interest, &c.....	6,278.97
	\$12,815,871.68

Statement December 31, 1912.

Ala., Mobile.—The County Revenue Board is reported to be considering road improvements under the \$500,000 good roads bond issue.

Ala., Montgomery.—The City Commission is reported to have ordered the issuing of \$78,000 of 5 per cent. 10-year roadway and street-improvement bonds; denomination \$1000. It is said the bonds will be purchased by the R. M. Grant Company of New York.

Ala., Prattville.—Official: Voted December 16: \$10,000 of 6 per cent. 10-year funding bonds; denomination \$1000; dated January 1, 1913; maturity January 1, 1923. J. C. Burns is Mayor and Eugene Ballard, City Attorney.

Fla., Green Cove Springs.—Terry, Briggs & Slayton, Toledo, O., are reported to have purchased at par \$20,000 of water, light, paving and sewer bonds.

Fla., Largo.—Official: \$10,000 of 6 per cent. 30-year water and light bonds voted December 10, 1912, are being offered at private sale; denomination \$1000; dated December 10, 1912. Address S. E. Smith, Mayor.

Fla., Madison.—Reported that \$5000 of water-works bonds are to be placed on the market.

Fla., Mulberry.—H. J. Koerner, City Clerk and Treasurer, writes that bids received January 1 for sale of water-works and sewerage bonds will not be opened as advertised. All bids will be returned, as it is necessary to have the issues properly validated before city can accept any further bids on them.

Fla., Pensacola.—Reported voted: \$400,000 of bonds for construction of municipal docks and belt-line railroad. Frank Reilly is Mayor.

Fla., Tallahassee.—Reported that \$30,000 of 5 per cent. 10-20-year street-improvement bonds have been purchased by the Bankers' Trust Co. of Jacksonville.

Fla., Tarpon Springs.—H. B. Webster, Mayor, writes that while there is some agitation relative to voting bonds for extension of sewer, paving and water mains, also building city hall and jail, nothing definite regarding the matter has been decided as yet.

Fla., Titusville.—Bids will be received until March 1 by W. J. Bailey, City Clerk, for \$23,000 of 5 per cent. 28-year water-works bonds; denomination \$1000; maturity January 1, 1941.

Ga., Americus.—Reported that election to vote on \$45,000 of school and \$10,000 of sewer 4½ per cent. 30-year bonds is postponed from January 2 to January 21.

Ga., Cornelia.—An election is to be held January 15 to vote on \$15,000 of bonds.

Ga., Grayson.—Bids will be received until 3 P. M. January 21 for \$6000 of 6 per cent. 30-year school bonds; denomination \$500; dated January 1, 1913; maturity January 1, 1943. Address J. W. Ford, secretary Grayson Local Tax School District.

Ky., Dayton.—Bids will be received until March 15 for \$20,000 of Fairfield Ave. reconstruction bonds voted last November; denomination \$1000. W. C. Quinby is Mayor.

Ky., Manfordsville.—An election is to be held in Hart County March 4. It is reported, to vote on \$200,000 of road bonds.

Ky., Murray.—R. H. Farwell, clerk county court, will receive bids until noon January 13 for \$40,000 of 5 per cent. Callaway county courthouse bonds; denomination \$1000.

La., Shreveport.—February 4, it is reported, an election is to be held to vote on \$50,000 of bonds to purchase land for State Fair Grounds. The question of issuing \$150,000 of bonds for streets, water-works, roads and sewers is also reported under consideration. Another ordinance provides for the issuing of \$195,000 of 4 per cent. refunding bonds.

Md., Annapolis.—The \$1,150,000 of 4 per cent. State bonds were awarded as follows: Esterbrook & Co., \$812,000 at 97.10 and interest; \$25,000 at 97.50 and interest; Poe & Davies, \$5000 at 98.25, \$5000 at 97.52, \$5000 at 97.41, \$5000 at 97.30, \$5000 at 97.19; W. N. Stromenger, Baltimore, \$8000 at 98 and interest; Townsend Scott & Sons (personally), \$10,000 at 97.75, \$10,000 at 97.50, \$10,000 at 98.25; R. L. Day & Co. and Hambleton & Co., \$250 at 97.193. (See Manufacturers Record, December 5.)

Md., Annapolis.—Bids will be received until noon February 3 for \$500,000 of 3½ per cent. Series F State road loan; dated February 1, 1913; maturity February 1, 1928. Phillips

Lee Goldsborough is Governor, Emerson C. Harrington Comptroller of the Treasury, and Murray Vardiver State Treasurer.

Md., Cambridge.—W. H. Spedden, County Clerk, it is reported, received bids until 2 P. M. January 7 for \$25,000 of 5 per cent. Dorchester county road bonds; denomination \$500; dated July 1, 1913; maturity, \$2500 January 1, 1922 to 1931.

Miss., Indianola.—Reported voted: \$20,000 of school-building bonds.

Miss., Jackson.—In addition to the \$300,000 of road bonds already issued, the city contemplates issuing an additional \$100,000 of bonds in the early spring for still further extension of the permanent good-roads system in the surrounding territory.

Miss., Laurel.—Notice is given that \$25,000 of bonds for school building are to be issued. F. H. Rush is Mayor and D. A. Scarborough City Clerk.

Miss., Liberty.—The election to vote on \$80,000 of Amite county road bonds will be held January 11, it is reported.

Miss., Philadelphia.—Reported voted: \$100,000 of road-improvement bonds of District No. 1, Neshoba county.

Miss., Port Gibson.—Reported that \$50,000 of 5 per cent. 20-year bonds are to be issued by Chalbone county to retire bonded indebtedness of the county.

Mo., Maryville.—Reported voted: \$50,000 of Polk township Nodaway county road bonds.

N. C., Asheville.—The city proposes to issue, it is reported, \$200,000 of 5 per cent. bonds to cover floating indebtedness of the city. J. E. Rankin is Mayor.

N. C., Greensville.—Bids, will be received until 2.30 P. M. January 9 by T. J. Murphy, Mayor, for \$50,000 of 5 per cent. 30-year improvement bonds.

N. C., Raleigh.—Regarding report that city proposes to issue bonds for water-works, James I. Johnson, Mayor, writes that the matter is in a very indefinite shape.

N. C., Thomasville.—Official: Bids will be opened on January 20 by C. G. Hill, Mayor, for \$15,000 of 5 per cent. 30-year water-works and sewerage bonds; denomination \$1000; dated December 1, 1912; maturity 1942. M. H. Stone is City Clerk.

Okla., Guthrie.—Reported that about February 1 Oklahoma will offer \$3,000,000 of State refunding bonds. Robert Dunlop is State Treasurer.

Okla., Sapulpa.—Official: J. C. Amendt, Chicago, purchased on December 23 at 95 the \$100,000 of 5 per cent. 20-year park bonds voted October 29, 1912; dated November 1, 1912; maturity November 1, 1932.

Okla., Tulsa.—An election is to be held January 21, it is reported, to vote on \$125,000 of convention-hall, \$40,000 of park and \$10,000 of boulevard bonds.

Okla., Texhoma.—An election is soon to be held. It is reported, to vote on \$25,000 of electric-light plant bonds.

S. C., McBee.—Official: H. C. Speer & Sons Company, Chicago, purchased at par for 8½ per cent. the \$7000 of 20-year school-building bonds; denomination \$1000; dated December 1, 1912; maturity December 1, 1932. Bonds were voted November 7, 1912. J. C. Hungerpillar is Clerk of Board.

Tenn., Chattanooga.—Hamilton county will ask Legislature for authority to issue \$750,000 of bonds for county schools and indebtedness, according to a dispatch received by the Manufacturers Record.

Tenn., Chattanooga.—Hamilton county is reported considering the question of issuing \$250,000 of bonds for additional buildings at Erlanger Hospital.

Tenn., Knoxville.—Bids will be received until noon January 9 for \$8000 of 5 per cent. 1-5-year city improvement bonds; denomination \$500; dated December 1, 1912. Sam E. Hill is Commissioner of Accounts and Finance, and D. G. Leahy is Recorder.

Tenn., Lonsdale, P. O. Knoxville.—Reported that city is seeking authority to issue \$20,000 of bonds to pay off floating indebtedness and improve streets.

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ALABAMA

Tex., Anderson.—Grimes county, it is reported, recently voted \$125,000 of road bonds.

Tex., Austin.—The Attorney-General is reported to have approved the following securities: \$20,000 of 5 per cent. 40-year Gollard independent schoolhouse bonds; \$130,000 of 5½ per cent. 40-year bonds of Brazoria county drainage district No. 8; \$47,000 of Brazoria county road district bonds; \$150,000 of 5½ per cent. 40-year bonds of Brazoria county road district No. 3; \$1000 of 5 per cent. 10-40-year bonds of Hardin county common school district No. 16; \$55,000 of 5 per cent. 10-40-year Mills county bonds; \$55,000 of 5 per cent. 20-40-year water-works bonds of Big Springs.

Tex., Bandera.—Reported that \$10,000 of Bandera school district bonds were recently voted.

Tex., Cooper.—The Commissioners' Court of Delta County is reported to have been awarded, at par, \$6900 of 5 per cent. 20-40-year school bonds; dated September 20, 1912; denomination \$250.

Tex., Cuero.—Cuter-Main of Chicago are reported to have purchased the remainder of the \$35,000 of school bonds.

Tex., Denison.—Reported that it is proposed to issue \$400,000 of filter-plant bonds.

Tenn., Dickson.—Reported voted: \$10,000 of bonds for completion of school.

Tex., El Paso.—Reported voted: \$350,000 of El Paso county road bonds and \$40,000 of district No. 3, El Paso county road bonds.

Tex., El Dorado.—January 11, it is reported, an election is to be held to vote on \$60,000 of Schleicher county courthouse bonds.

Tex., Falfurrias.—Reported voted: \$80,000 of courthouse and \$45,000 of road bonds of Brooks county.

Tex., Gainesboro.—J. B. Alken Company of Houston is reported to have been awarded \$64,950 of 5 per cent. bonds of District No. 3, Jackson county. J. W. Bagby is County Judge.

Tex., Greenville.—Well, Roth & Co. of Cincinnati are reported to have purchased at 101 and interest \$75,000 of 5 per cent. paying bonds; dated January 1, 1913; maturity 1914 to 1923; denomination \$500.

Tex., Hallettsville.—February 5, it is reported, an election is to be held to vote on \$100,000 of Lavaca county road-improvement bonds.

Tex., Houston.—Reported voted: \$10,000 of bonds of Fullerton-Cage school district.

Tex., Hearne.—January 21, it is reported, an election is to be held to vote on road bonds.

Tex., Marshall.—Well, Roth & Co. of Cincinnati are reported to have purchased \$28,000 of 5 per cent. 10-40-year paying bonds at \$28.148 and interest.

Tex., Port Lavaca.—Reported voted: \$135,000 of Calhoun county road-building bonds. F. M. Dudgeon is County Judge.

Tex., Port Lavaca.—Reported voted: \$135,000 of Precincts Nos. 1 and 2, Calhoun county, road bonds.

Tex., Smiley.—Reported voted: \$10,000 of Smiley independent school district building bonds.

Tex., Sweetwater.—Reported voted: \$100,000 of Nolan county road bonds.

Tex., Taylor.—Official: John B. Oldham, Dallas, Tex., has purchased at private sale, at 100.75 and interest, \$10,000 of 5 per cent. 10-40-year school bonds.

Tex., Waco.—February 6 an election is to be held. It is reported, to vote on \$100,000 of street improvements and \$120,000 school bonds.

Va., Christiansburg.—January 30, it is reported, an election is to be held to vote on \$15,000 of Montgomery county jail bonds.

Va., Marion.—Marion District, Smyth county, is reported to have voted \$150,000 of bonds, and St. Clair district, in the same county, \$75,000 of bonds for road construction.

Va., Wise.—Richmond Magisterial District, Wise county, is reported to have voted \$130,000 of district road bonds.

Va., Wise.—Reported voted: \$130,000 of Gladeville district, Wise county, road bonds.

W. Va., Charleston.—Official: Voted December 17: \$300,000 of 5 per cent. 24-year bonds to purchase land and erect school buildings; denomination \$1000. W. O. Daum is secretary Board of Education, and Geo. S. Laidley is superintendent of schools.

FINANCIAL NOTES.

The Guarantee Mortgage Co. of Birmingham, Ala., is reported to have filed notice of increase in capital from \$2000 to \$60,000.

The Farmers and Merchants' Bank of Lake

City, S. C., is reported to have increased its capital from \$50,000 to \$100,000.

The Bank of Louisville, at Louisville, Ala., contemplates, it is reported, increasing its capital from \$15,000 to \$25,000.

The Bank of Maysville, at Maysville, Ga., is reported to have voted to increase its capital from \$15,000 to \$25,000.

The first National Bank of Ada, Okla., is reported to have taken over the business of the Ada National Bank.

The First National Bank and the Oklahoma State Bank are reported consolidated under the name of the former institution.

The Citizens' Fire Insurance Co., with headquarters in Baltimore, Md., will increase its capital from \$350,000 to \$1,000,000.

The conversion of the Citizens' Bank of Henryetta, Okla., into the Citizens' National Bank of Henryetta is reported approved; capital \$25,000.

The Citizens' Bank of Reidsville, N. C., has made application to convert into the First National Bank of Reidsville; capital \$100,000.

The National Bank of West Virginia, at Wheeling, proposes to increase its capital from \$100,000 to \$500,000. W. B. Irvine is vice-president.

The savings department of the Mutual Savings & Trust Co. of Lynchburg, Va., is reported to have begun business, the offices being on 9th St.

The Definite Contract Building and Loan Association of Norfolk, Va., proposes to increase its capital from \$1,500,000 to \$2,500,000. J. W. Perry is president.

The Bessemer State Bank of Bessemer, Ala., according to press reports, will amend its charter increasing its capital from \$75,000 to \$100,000. G. R. Hollingsworth is cashier.

A condensed statement of 388 State banks in North Carolina at close of business December 5, 1912, shows resources of \$83,583,741; capital stock, \$2,964,652; total deposits, \$63,026,478.

The Pan-American Life Insurance Co., according to reports from New Orleans, La., is negotiating with a big Eastern life insurance company for the purchase of the control of its capital stock.

The Wentzka Trust & Banking Co. of Hendersonville, N. C., is reported to have accepted authority to change its name to the First Bank & Trust Co.; increase its capital from \$30,000 to \$100,000.

Dispatches from Atlanta, Ga., state that the "Cosmopolitan Life Insurance Co." of Atlanta is to be reorganized as the "The Cosmopolitan Life Insurance Co." and that the new company will be ready for business by February 1.

The merger of the South Atlantic Life Insurance Co. of Richmond and the American National Life Insurance Co. of Lynchburg, Va., under the name of the Atlantic Life Insurance Co. is reported completed. Offices will be in the Mutual Bldg.

The McElwain-Megular Bank & Trust Co. and the Farmers and Merchants' National Bank, both of Franklin, Ky., are reported to have consolidated under the name of the McElwain-Megular Bank & Trust Co. The capital of the new firm is \$75,000, with a surplus of \$18,750.

The Farmers' Union Bank and the Tipton County Bank, both of Covington, Tenn., are reported to have consolidated under the name of the Tipton County Farmers' Union Bank with a capital of \$200,000. John T. Gardner will be president and W. V. McFadden cashier.

The Interstate Casualty Co. of Birmingham is reported to have purchased the assets of the Industrial Insurance Co., also of Birmingham, Ala., and will, it is reported, be merged under the name of the former institution and the capital increased from \$250,000 to \$500,000.

Dispatches from Louisville, Ky., state that arrangements are being made to merge the Tennessee Indemnity Co. with the Kentucky Livestock Insurance Co., recently organized, which, when in operation, will have a capital of \$250,000. Offices will be in the Inter-Southern Bldg., Louisville. J. W. Nedman will be president and C. E. Buckles vice-president.

A condensed statement of the State banks and trust companies in West Virginia at close of business November 26, 1912, shows loans and discounts \$62,845,347; due from banks, \$10,835,397; capital stock paid in, \$11,774,536; surplus fund, \$6,317,364; dividends unpaid, \$61,590; undivided profits, \$2,613,869; due to banks, \$1,699,641; deposits subject to check, \$31,747,216; demand certificates, \$1,301,885; time certificates, \$21,544,198; savings deposits, \$12,628,047; total resources, \$90,586,595.

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One No. 9 Full-Circle Thew Shovel.
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E. S. CENTER

General Agent

EAST POINT, GA.

ANNUAL REPORT OF THE CONDITION OF THE PROVIDENT SAVINGS BANK OF BALTIMORE, IN THE STATE OF MARYLAND, AT THE CLOSE OF BUSINESS DECEMBER 31, 1912, IN CONFORMITY WITH SECTION 36 OF THE BANKING LAW.

Funds on hand December 31, 1911, \$5,466,064 27
Received from depositors during 1912..... 3,726,900 24
Received interest and dividends on stocks, bonds, loans, etc., during 1912..... 253,139 90

Total..... \$9,446,104 41

Paid depositors during 1912, including interest..... \$3,515,355 55
Paid expenses during 1912..... 38,617 330
Paid taxes during 1912..... 19,366 46
Paid premiums, etc., during 1912..... 450 00
Ledger cost of bonds reduced during 1912..... 14,123 87
Funds on hand December 31, 1912..... 5,858,192 23

Total..... \$9,446,104 41

ASSETS (Book Values).
Bonds and stocks owned..... \$3,171,997 45
Loans on collaterals..... 44,793 08
Loans on mortgages..... 2,153,106 00
Real estate, central office and branches..... 336,050 06
Other real estate owned..... 23,509 21
Cash on hand and in banks and trust companies..... 126,646 43

Total..... \$5,858,192 23

LIABILITIES.
Due depositors..... \$5,561,808 10
Guarantee fund and undivided surplus, chargeable with 9 months' accrued interest on deposits payable April 1, 1913..... 296,384 13

Total..... \$5,858,192 23

Accounts open December 31, 1911..... 53,221
Accounts opened during 1912..... 14,295
Accounts closed during 1912..... 12,172
Accounts existing December 31, 1912..... 55,254

ELISHA H. PERKINS, President.
G. HERBERT BOEHM, Treasurer.
In accordance with Article XIII, Section 1, of the By-Laws of the PROVIDENT SAVINGS BANK, the undersigned, Directors, have examined the above statement and certify that it is correct. FRANCIS A. WHITE, JOHN J. DOBLER, LEMUEL T. APPOLD.

Central Savings Bank of Baltimore

S. E. CORNER CHARLES AND LEXINGTON STREETS.

BALTIMORE, MARYLAND

ANNUAL REPORT OF THE CONDITION OF THE

CENTRAL SAVINGS BANK OF BALTIMORE

in the State of Maryland, at the close of business December 31st, 1912, in conformity with Section 36 of the Banking Law.

Funds on hand December 31st, 1911..... \$10,513,329 45
Received from depositors during 1912..... 3,477,812 13
Received interest and dividends on stocks, bonds, loans, etc., during 1912..... 478,361 55
Total..... \$14,469,503 13

Paid depositors during 1912, including interest..... \$3,622,924 91
Paid expenses during 1912..... 34,648 68
Paid taxes during 1912..... 29,465 14
Paid premiums during 1912..... 6,874 68
Ledger cost of bonds reduced during 1912..... 37,818 75
Funds on hand December 31st, 1912..... 10,737,800 97
Total..... \$14,469,503 13

Par Value.	ASSETS.	Ledger Value.	Market Value.
\$500,000	State Bonds.....	\$466,575.00	\$468,512.50
78,000	County Bonds.....	77,500.00	78,922.50
2,039,000	Municipal Bonds.....	2,005,250.00	2,027,235.00
3,116,500	Railroad Bonds.....	2,890,502.50	3,074,272.50
670,000	Street Railway Bonds.....	654,500.00	670,732.50
150,000	Gas Company Bonds.....	147,500.00	152,625.00
315,000	Equipment Bonds.....	312,330.00	312,767.50
44,000	Merchants and Miners' Transportation Co. Bonds.....	43,120.00	43,120.00
25,000	Coal Company Bonds.....	22,875.00	22,875.00
\$6,937,500		\$6,730,252.50	\$6,851,062.50
	Mortgage Loans.....	\$2,422,045.00	\$2,422,045.00
	Collateral Loans.....	785,329.95	785,329.95
	Real Estate—Bank Building.....	200,000.00	200,000.00
	Real Estate—No. 5 E. Lexington St.....	34,212.47	34,212.47
	Perpetual Insurance Deposits.....	850.00	850.00
	Cash on hand and in banks.....	575,111.05	575,111.05
		\$10,737,800.97	\$10,808,610.97

LIABILITIES.

Due depositors, including 3½ per cent. interest credited December 31, 1912..... \$9,817,708.47
Guarantee Fund, 28 per ledger..... 920,092.50
Excess of Assets (at market value) over Liabilities..... 1,650,902.50

\$10,737,800.97 \$10,808,610.97

Accounts open December 31st, 1911..... 21,566
Accounts opened during 1912..... 2,125
Accounts closed during 1912..... 2,159
Accounts open December 31st, 1912..... 21,532

R. K. WARING,
President.
J. WILSON COLE,
Treasurer.

Baltimore, January 1st, 1913.

We find upon examination that the investments of the Central Savings Bank of Baltimore have been carefully made in bonds of the most substantial character; that its loans are well secured, and that it is economically and judiciously managed.

HOWARD E. STEWART,
JOHN S. DEALE,
GUSTAVUS OBEL.

EUTAW SAVINGS BANK OF BALTIMORE
S. W. CORNER EUTAW AND FAYETTE STREETS

ANNUAL REPORT OF THE CONDITION OF THE
Eutaw Savings Bank of Baltimore

in the State of Maryland, at the close of business December 31, 1912, in conformity with Section 36 of the Banking Law.

Funds on hand December 30, 1911.....	\$26,039,045.61
Received from Depositors during 1912.....	7,289,583.15
Received interest and dividends on stocks, bonds, loans, etc., during 1912.....	1,191,230.85
Total, \$34,519,859.61	

Paid Depositors during 1912, including interest.....	\$7,411,991.91
Paid expenses during 1912.....	50,753.92
Paid taxes during 1912.....	61,653.77
Reduction in cost of Banking House.....	15,000.00
Paid premiums, etc., during 1912.....	12,524.88
Ledger cost of bonds reduced during 1912.....	26,000.00
Paid accrued interest on investments.....	14,481.78
Funds on hand December 31, 1912.....	26,927,453.35
Total, \$34,519,859.61	

ASSETS
(Book Value).

Bonds and stocks owned.....	\$21,823,471.80
Loans on mortgages.....	3,545,681.00
Real Estate (Bank Building).....	278,158.07
Ground Rents.....	32,300.00
Cash in Banks.....	1,247,842.48
Total, \$26,927,453.35	

LIABILITIES

Due Depositors.....	\$23,820,628.68
Guarantee Fund.....	1,800,000.00
Undivided Surplus (chargeable with 9 months' accrued interest on deposits payable April 1, 1913).....	1,306,824.67
Total, \$26,927,453.35	

Accounts open December 30, 1911.....	44,882
Accounts opened during 1912.....	5,673
Accounts closed during 1912.....	5,534
Accounts existing December 31, 1912.....	45,021

WILLIAM M. HAYDEN, *President.*
FRANK G. EVANS, *Treasurer.*

BALTIMORE, January 3, 1913.

At the request of the Board of Directors of the Eutaw Savings Bank of Baltimore the undersigned have audited the above record of the operations of the Bank for the past year and have examined and verified its Statement of Assets and Liabilities.

CHARLES C. HOMER,
(*President Second National Bank*)

TOWNSEND SCOTT,
(*Townsend Scott & Son, Bankers*)

WILLIAM MARRIOTT,
(*Cashier Western National Bank*)

WILLIAM WINCHESTER,
(*President National Union Bank*)

DANIEL C. AMMIDON,
(*Ammidon & Co., Merchants*)

EDWIN W. LEVERING, JR.,
(*Baker, Watts & Co., Bankers*)

ANNUAL REPORT

OF THE CONDITION OF

**THE SAVINGS BANK
OF BALTIMORE**

Of Baltimore, in the State of Maryland

AT THE

Close of Business December 31st, 1912

in conformity with Section 36 of the Banking Law.

Funds on hand December 30, 1911.....	\$35,296,074.72
Received from Depositors during 1912.....	7,811,033.02
Received interest and dividends on stocks, bonds, loans, etc., during 1912.....	1,697,250.82
Total.....	\$44,804,358.56

Paid Depositors during 1912, including interest.....	\$8,012,790.58
Paid expenses during 1912.....	67,010.82
Paid taxes during 1912.....	93,013.15
Paid premiums, etc., during 1912.....	199,586.66
Ledger cost of bonds reduced during 1912.....	104,339.44
Funds on hand December 31, 1912.....	36,327,617.91
Total.....	\$44,804,358.56

ASSETS
(Book Value.)

Bonds and stocks owned.....	\$33,173,870.83
Loans on collateral.....	4,000.00
Loans on mortgages.....	2,409,875.00
Real Estate (Bank Building).....	300,000.00
Other Real Estate owned.....	63,873.66
Cash on hand and in Banks.....	375,998.42
Total.....	\$36,327,617.91

LIABILITIES

Due Depositors.....	\$33,696,394.20
Guarantee Fund.....	1,750,000.00
and	
Undivided Surplus (chargeable with nine months' accrued interest on deposits payable April 1, 1913).....	881,223.71
Total.....	\$36,327,617.91

Accounts open December 30, 1911.....	54,022
Accounts opened during 1912.....	6,460
Accounts closed during 1912.....	6,125
Accounts existing December 31, 1912.....	54,357

WILLIAM H. CONKLING, *President.*
FREDERICK A. HOFFMAN, *Treasurer.*

The undersigned, appointed by the Board of Directors of THE SAVINGS BANK OF BALTIMORE to audit its Statement for the past year and to report thereon, have carefully performed the duty assigned to them and find the same to be correct.

CHARLES T. CRANE,
HENRY B. WILCOX,
WILLIAM G. BAKER, Jr.

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